

## Curriculum Vitae

### Personal details

Name: Peter Jan Beek  
Date of Birth: July 9, 1959  
Place of Birth: Delft, the Netherlands  
Civil Status: Married  
Citizenship: The Netherlands  
Address (Work): Department of Human Movement Sciences, Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam, van der Boechorststraat 7-9, 1081 BT Amsterdam, The Netherlands  
Address (Home): Jacob van Lennepkade 57, 1054 ZH Amsterdam, The Netherlands  
Telephone: 020-5988532 (Work), 020-6187206 (Home), 06-39659365 (Mobile)  
E-mail address: p.j.beek@vu.nl  
Webpages: research.vu.nl/en/persons/pj-beek (VU), peterjbeek.com (Personal Webpage)

### Education

1971-1977: Atheneum-B, Hugo Grotius Scholengemeenschap, Delft, The Netherlands  
1977-1980: Interfaculty of Physical Education, Vrije Universiteit Amsterdam, The Netherlands, BSc, cum laude  
1980-1985: Interfaculty of Physical Education, Vrije Universiteit Amsterdam, The Netherlands, MSc, cum laude  
1985-1989: Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands, Ph.D., cum laude

### Academic positions

1988-1994: Assistant Professor (University Docent), Department of Psychology, Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands.  
1989-Present: Fellow of the Center for the Ecological Study of Perception and Action, Department of Psychology, University of Connecticut, Storrs, CT, U.S.A.  
1994-1998: Associate Professor (University Head Docent), Department of Psychology, Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands  
1998-2015: Full Professor of Coordination Dynamics, Department of Motor Behavior, Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands  
2005-2010: Visiting Professor at the Centre for Sport and Exercise Sciences, John Moores University Liverpool, Liverpool, United Kingdom  
2007-2015: Dean of Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands  
2014-2015: Interim Dean of Faculty of Psychology and Education, Vrije Universiteit Amsterdam, The Netherlands  
2015-2019: Dean of Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands  
2015-Present: Professor of Coordination Dynamics, Department of Human Movement Sciences, Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam, The Netherlands

### (Past) Teaching Activities

Graduate and undergraduate courses in: Motor Control and Learning; Coordination Dynamics; Perception and Action; Research Methods; Philosophy and History of Human Movement Sciences.

### Research Interests

Motor Control and Learning; Coordination Dynamics; Sports; Rehabilitation.

### Professional societies

- International Society for Ecological Psychology (Member)
- Psychonomic Society (The Netherlands Foundation for Scientific Research; Past Member)
- Vereniging voor Bewegingswetenschappen Nederland (Society for Human Movement Sciences the Netherlands, Member, Past Board Member)
- Association for Psychological Science (Member of Integrative Science Initiative Steering Committee, Past Member)

### Courses in teaching

- Course on Lecturing, Education Advisory Bureau, Vrije Universiteit Amsterdam, 1996
- Course on Testing and Grading, Education Advisory Bureau, Vrije Universiteit Amsterdam, 1997

### Management and leadership courses

- Management of human resources, Looten-De Sonnaville Management Consultants, 1995
- CALL: Community for Authentic Leadership and Learning, Twijnstra & Gudde, 2008-2009

### Editorial activities

- Former Editor-in-chief of *Human Movement Science* (1999-2019)
- Former Editorial Board Member of *Ecological Psychology*
- Former Editorial Board Member of *Journal of Motor Behavior*
- Editorial Board Member of *Sensors*
- Editor of *Frontiers in Network Physiology*
- Member of the Scientific Advisory Board of *German Journal of Exercise and Sport Research*

#### **Ad hoc reviewing activities (for peer-reviewed journals)**

*Acta Psychologica; Advances in Neuroscience; Annals of the New York Academy of Sciences; Behavioral and Brain Sciences; Biological Cybernetics; Biomed Research International; British Journal of Psychology; Clinical Interventions in Aging; Cognitive Psychology; Developmental Psychology; Developmental Science, Disability and Rehabilitation; Ecological Psychology; Educational Research Review; Ergonomics; Experimental Brain Research; European Journal of Pain; Frontiers in Neuroscience; Frontiers in Sports and Active Living; Gait & Posture; IEEE Transactions on Biomedical Engineering; International Journal of Sports Medicine; Journal of Electromyography and Kinesiology; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Human Perception and Performance; Journal of Medical Internet Research; Journal of Motor Learning and Development; Journal of Neurophysiology; Journal of Sport Sciences; Journal of the Royal Society Interface; Medicina; Motor Control; Neuroscience Letters; Perception, Perception and Psychophysics; Perceptual and Motor Skills; Physica D; PLOS Computational Biology; PLOS One; Prosthetics & Orthotics International; Psychology of Sport & Exercise; Sport en Geneeskunde; Research Quarterly for Exercise and Sport; Somatosensory & Motor Research; Scientific Reports (Nature Research); Transactions on Neural Systems and Neuro-rehabilitation Engineering; Sensors.*

#### **Ad hoc reviewing activities (for scientific funding institutions)**

*Austrian Science Fund (FWF); Christian Doppler Forschungsgesellschaft (Austria); Der Wissenschaftsfonds (FWF, Austrian Science Fund); European Science Foundation (ESF); The Fund for Scientific Research (FNRS, Brussels, Belgium); The Health Research Board (Ireland); The International Olympic Committee (Lausanne, Switzerland); The Israel Science Foundation; The Vrije Universiteit Brussel (expert panel for the Research Evaluation 'Physical education and physiotherapy'); The MacArthur Foundation (USA); The National Science Foundation (USA); The N.A.T.O. and the European Community (European Scientific Foundation, i.c. ESF's Standing Committee for the Social Sciences SCSS, 'Marie Curie International Reintegration Grants' as part of the Human Resources and Mobility component of the European Sixth Framework Programme); The Research Foundation — Flanders (Fonds voor Wetenschappelijk Onderzoek Vlaanderen); Research Grants Council of Hong Kong; The Katholieke Universiteit Leuven; The U.S.-Israel Binational Science Foundation; The Royal Society of Edinburgh; The Netherlands Organization for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek, Royal Irish Academy, Stichting Maatschappij- en Gedragwetenschappen, Stichting Levenswetenschappen, Stichting Technische Wetenschappen, ZonMw); United Arab Emirates University.*

In addition, I have written numerous confidential assessments and letters of recommendation for individual scholars, be it for promotion at their own university or job applications elsewhere.

#### **External Funding**

- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on the coordination of rhythmic movements (1989-1993) — with dr. P. C. W. van Wieringen [k€ 110].
- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on polyrhythmic tapping (1992-1996) — with dr. P. C. W. van Wieringen [k€ 110].
- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on developmental transitions (1992-1996) — with prof. dr. B. Hopkins [k€ 110].
- A grant from Vrije Universiteit Amsterdam (USF'95) for a two-year post-doctoral research project on the dynamics of brain activity during polyrhythmic tapping (1999-2000) [k€ 80].
- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year post-doctoral research project on the stability and flexibility of walking (1996-2000) — with dr. R. C. Wagenaar [k€ 160].
- Principal applicant of a grant from N.W.O. (The Netherlands Foundation for Scientific a four-year research programme on the stability and flexibility of movement (1996-2000), entailing three graduate research projects and one post-doctoral research project — with dr. W. Hulstijn [k€ 500].
- A grant from Vrije Universiteit Amsterdam (USF'96) for a research program on discrete and rhythmic movements (1996-2000), involving three post-doctoral research projects (of four years each) [k€ 480].
- A grant from the K.N.V.B. (The Royal Dutch Soccer Association) for a four-year research project on the perceptual abilities of young soccer players and soccer referees (1996-2000) — with dr. F. C. Bakker [k€ 110].
- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a 3D movement registration system (OptoTrak) and a 2D data-projection system (Barco plus Silicon Graphics Onyx) (1997) — with dr. R. C. Wagenaar [k€ 160].
- A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on the development of dexterity in juggling (1999-2003) [k€ 120].
- A grant from Vrije Universiteit Amsterdam ("Breedtestrategie") for a four-year graduate research project on the visual regulation of interceptive actions (1999-2003) [k€ 120].

Principal applicant of a grant from Vrije Universiteit Amsterdam (“Breedtestrategie”) for a four-year research programme on the visual regulation of interceptive actions (1999-2003) [k€ 500].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on the inertia tensor hypothesis in haptics (2002-2006) — with dr. I. Kingma [k€ 160].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on synchronization in the brain (2002-2006) — with dr. A. Daffertshofer [k€ 160].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on automatization and deautomatization (2002-2006) — with dr. R. R. D. Oudejans [k€ 160].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on the infusion of affect and social context in the perception-action interface (2002-2006) — with prof. dr. G. Semin [k€ 160].

A grant from NOC/NSF (The Netherlands Olympic Committee/Netherlands Sport Federation) for a (BOK) research project to determine the effects of force training on movement coordination in an elite athlete (2003) [k€ 6].

A grant from Research Institute MOVE, Vrije Universiteit Amsterdam (internal competition), for a four-year graduate post-doctoral research project on posturography in a clinical context (2004-2008) [k€ 180].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a four-year graduate research project on dynamic touch and optimal cue theory (2008-2012) — with dr. I. Kingma and prof. dr. J. Smeets [k€ 180].

A grant from Research Institute MOVE, Vrije Universiteit Amsterdam (internal competition), for a four-year graduate research project on the effects of bilateral training on the improvement of arm and hand function in stroke patients (2004-2008) [k€ 180] — with prof. dr. G. Kwakkel and dr. C. E. Peper [k€ 180].

A grant from N.W.O. (The Netherlands Foundation for Scientific Research) for a three-year post-doc research project on the classification of gait patterns (2009-2012) — with dr. A. Daffertshofer [k€ 220].

A grant from ZonMW/N.W.O. (The Netherlands Foundation for Scientific Research) for a research project aimed at developing and testing a novel instrument to support fall prevention in extramural care involving a post-doctoral researcher and two graduate studentens (2010-2014) — with dr. M. Pijnappels, prof.dr. J. H. van Dieën, dr. P. J. Elders and prof.dr. P. T. A. M. Lips [k€ 669].

A grant from the EU (European Union, Erasmus Mundus program MOVE-Age) for a three-year graduate research project on the relationship between executive function and gait adaptability in older adults (“Watch out! Gait adaptability in older adults with low and high executive function”) (2012-2015) — with dr. C. E. Peper and dr. M. Roerdink [k€ 170].

A grant from COMMIT/ (A Public Private Research Community) for a research project called “Sensor driven coaching for healthy living” (2013-2017) — with prof.dr. J. H. van Dieën and Infosys [k€ 240].

A grant from NWO/STW for a research program called “Optimalisatie van voortstuwing door en over het water” (2013-2018) — with prof.dr. H. J. H. Clercx, prof.dr. J. Westerweel and dr. A. J. van Soest [M€ 1,2].

A grant from NWO/TTW for a research program called “Citius Altius Sanius” (2017-2022) — with prof.dr. F. C. T. van der Helm and MSc. D. Bregman [M€ 6,2].

A grant from NWO/NWA for a small project “Moving smarter with XR” (2021-2023) [k€ 95].

## Patents

Device for displaying target indications for foot movements to persons with a walking disorder (2009, Inventors: M. Roerdink, P. J. Beek; Assignee: ForceLink BV) US2009246746-A1; EP2106779-A1; JP2009240775-A; NL1035236-C2

## Co-supervisor of completed Ph.D. projects (3)

Van Santvoord, A. A. M. (1995). *Cascade juggling: Learning, variability, and information. Published Doctoral Dissertation.* Enschede: CopyPrint 2000. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, January 27, 1995.

Peper, C. E. (1995). *Tapping dynamics. Published Doctoral Dissertation.* Amsterdam: CopyPrint 2000 (*cum laude*). Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, November 27, 1995.

Wimmers, R. H. (1996). *Grasping developmental change. Published Doctoral Dissertation.* Amsterdam: CopyPrint 2000. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 19, 1996.

## Supervisor of completed Ph.D. projects (48)

Leemrijse, C. J. (2000). *Developmental coordination disorders: Evaluation and treatment. Published Doctoral Dissertation.* Enschede: Print Partners Ipskamp B.V. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, March 16, 2000.

Post, A. A., (2000). *Effects of task constraints on the relative phasing of rhythmic movements. Published Doctoral Dissertation.* Enschede: PrintPartners Ipskamp B.V. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 15, 2001.

Frank, T. D. (2000). *Stochastic properties of human motor control: Nonlinear Fokker-Planck equations. Published Doctoral Dissertation.* Enschede: PrintPartners Ipskamp. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 20, 2001 (*cum laude*).

Donker, S. F. (2002). *Flexibility of human walking: A study on interlimb coordination. Published Doctoral Dissertation.* Ph.D. Defense, Groningen University, The Netherlands, October 30, 2002.

Wu, W. (2004). *Pregnancy-related Pelvic girdle Pain (PPP): An emphasis on transverse pelvis-thorax coordination during walking. Published Doctoral Dissertation.* Amsterdam: Reprohouse. Ph.D. Defense, Vrije Universiteit Amsterdam,

- The Netherlands, January 28, 2004.
- Lamoth, C. (2004). *Walking with back pain. Published Doctoral Dissertation. Published Doctoral Dissertation*. Amsterdam: ReproHouse. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, April 1, 2004.
- Huys, R. (2004). *Disentangling perceptual-motor learning. Published Doctoral Dissertation*. Amsterdam: Reprohouse. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, June 22, 2004.
- Dessing, J. (2005). *Neural dynamics underlying interceptive actions. Published Doctoral Dissertation*. Amsterdam: ReproHouse. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, March 4, 2005 (*cum laude*).
- Pijpers, R. (2006). *The impact of anxiety on perceptual-motor behaviour. Published Doctoral Dissertation*. Enschede: Febodruk B.V. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, April 13, 2006.
- Kistenmaker, D. (2006). *The control of fast goal-directed movements. A critical test of the equilibrium point hypothesis. Published Doctoral Dissertation*. Amsterdam: ReproHouse. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 18, 2006.
- Van Mourik, A. (2006). *Structure from randomness: A window into coordination. Published Doctoral Dissertation*. Enschede: PrintPartners Ipskamp. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, June 2, 2006.
- Ridderikhoff, A. (2006). *Rhythmic bimanual coordination: Interlimb interactions and effector dynamics. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, September 15, 2006.
- Selen, L. P. J. (2006). *Impedance modulation: A means to cope with neuromuscular noise. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 16, 2007.
- Van de Langenberg, R. (2007). *How do you feel? An inquiry into dynamic touch and proprioception. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, June 4, 2007.
- De Poel, H. (2007). *Asymmetric interlimb coupling strength in rhythmic bimanual coordination. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, June 4, 2007.
- Boonstra, T. (2007). *Neural dynamics of human motor control. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, September 20, 2007.
- Ferraz de Oliveira, R. (2007). *Visual perception for basketball shooting. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, October 29, 2007.
- Roerdink, M. (2009). *Anchoring: Moving from theory to therapy. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 17, 2009.
- Scholz, M. (2009). *Jump and run. Energetics and mechanics of explosive and cyclic movements. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 11, 2009.
- Bruijn, S. M. (2010). *Is stability an unstable concept? Quantifying dynamic stability of human locomotion. Published Doctoral Dissertation*. Amsterdam: Ipskamp (ISBN 9789 0865 9455 9). Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 27, 2010.
- Van Ulzen, N. R. (2010). *Exploring affective perception and social action. Published Doctoral Dissertation*. (ISBN 9789076269887). Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 27, 2010.
- Vardy, A. (2010). *Moving in time: Neurons, clocks, and rhythmic movements. Published Doctoral Dissertation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 8, 2010.
- Houweling, S. (2010). *Neural entrainment in coordination dynamics. Published Doctoral Dissertation*. Ridderkerk: Ridderprint Offsetdrukkerij (ISBN 9789 0865 9510 5). Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 13, 2010.
- Van Wijk, B. (2012). *Neural synchronization within and between regions of the motor system. Published Doctoral Dissertation*. Enschede: Ipskamp Drukkers (ISBN 978-94-6191-480-4). Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, November 26, 2012.
- De Boer, B. J. (2013). *Stabilizing bimanual coordination: Changes in interlimb interactions*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, January 21, 2013.
- Debats, N. (2013). *Exploratory movements in haptic perception*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 25, 2013.
- Van Delden, A. E. Q. (2014). *Unilateral versus bilateral upper limb training after stroke*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 14, 2014.
- Bank, L. (2014). *Motor dysfunction in Complex Regional Pain Syndrome. The role of sensory processing and sensory-motor integration*. Leiden University, The Netherlands, April 8, 2014.
- Hak, L. (2014). *Step by step. Stepping strategies to prevent falling while walking*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 8, 2014.
- Marmelat, V. (2014). *Synchronization with fractal rhythms. Complexity matching of statistical structure*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, September 30, 2014 (double degree).
- Marmelat, V. (2014). *Appariement des structures temporelles de deux systèmes complexes couplés: perspectives de réhabilitation d'un système déficient*. Ph.D. Defense, SMH Sciences du Mouvement Humain, UM1, Montpellier, France, October 24, 2014 (double degree).
- Rispens, S. (2015). *A walk on the wild side. Fall-risk assessment from daily-life gait*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 27, 2015.
- Ijmker, T. (2015). *Balance control in human walking: An energetic perspective*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, September 22, 2015.
- Hutter, R. I. (2016). *Training and assessment for sport psychology practice*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, May 20, 2016.
- Mazaheri, M. (2016). *Older adults: Mind your step!* Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, October 28,

2016. Stevens, T. (2017). *External load during football training: The power of acceleration and deceleration*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 23, 2017.
- Van Lummel, R. C. (2017). *Assessing sit-to-stand for clinical use*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, March 30, 2017.
- Van Ooijen-Kerste, M. (2017). *Steps to follow. Toward the clinical assessment and training of walking adaptability*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, April 26, 2017.
- De Melker Worms, J. (2017). *Human balance control: Effects of fear and attention in standing and walking*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, July 3, 2017.
- Van den Heuvel, M. (2017). *Augmented visual feedback in Parkinson's disease – assessing and improving postural control*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 22, 2017.
- Van Houwelingen, J. (2018). *In the swim. Optimising propulsion in human swimming*. Ph.D. Defense, Technische Universiteit Eindhoven, The Netherlands, October 30, 2018.
- Van der Graaff, E. (2019). *Perfecting your pitch. In search of the perfect baseball pitch and its training*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, April 10, 2019.
- Timmermans, C. (2019). *Walking-adaptability assessment and training: Steps towards clinical implementation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, September 17, 2019.
- Lintmeijer, L. L. (2019). *Power in rowing: In search of effective feedback variables*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 18, 2019.
- Bouman, D. (2020). *Taking approach-avoidance research a step further*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, December 10, 2020.
- Van Oeveren, B. (2021). *Running deciphered. Interpretation of running technique from wearable data*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, January 11, 2021.
- Schreven, S. (2023). *Crawling forward on drag and propulsion*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, February 13, 2023.
- Smit, M. (2023). *Sexual abuse in individuals with intellectual disability: A psychomotor perspective*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, October 4, 2023.
- Nijs, A. (2023). *Exploring running style modulation*. Ph.D. Defense, Vrije Universiteit Amsterdam, The Netherlands, October 23, 2023.

#### **Supervisor of current Ph.D. projects (7)**

Bert Coolen, Radoslaw Dukalski, Sander Ganzevles, Michel de Haan, Minke van de Kamp, Paul Koster, Carola Minkels.

#### **External examiner of Ph.D. theses (43)**

- Van Soest, A. J., *Jumping from structure to control. A simulation study of explosive movements*. Vrije Universiteit Amsterdam, The Netherlands, October 22, 1992.
- Van Doorn, R., *Relevance of vision for adult handwriting*. Vrije Universiteit Amsterdam, The Netherlands, March 16, 1992.
- Koken, P. W., *Human eye and hand movements in tracking tasks*. University of Utrecht, The Netherlands, December 7, 1993.
- Zaal, F. T. J. M., *On prehension. Toward a dynamical account of reaching and grasping movements*. Vrije Universiteit Amsterdam, The Netherlands, November 1, 1995.
- Stins, J., *Information-action compatibility*. Vrije Universiteit Amsterdam, The Netherlands, April 1, 1998.
- Schillings, J. J., *The control of joint movement in graphic performance: A kinematic approach*, Katholieke Universiteit Nijmegen, Nijmegen, The Netherlands, November 2, 1998.
- Kingma, I., *Challenging gravity: The mechanics of lifting*. Vrije Universiteit Amsterdam, The Netherlands, December 7, 1998.
- Boessenkool, J. J., *Moving two hands: Common versus independent control*. University of Utrecht, The Netherlands, June 21, 1999.
- Mates, J., *On the synchronization of simple motor responses to a metronome*. Katholieke Universiteit Nijmegen, Nijmegen, The Netherlands, September 20, 1999.
- Bongers, R. M., *An action perspective on tool use and its development*. Katholieke Universiteit Nijmegen, Nijmegen, The Netherlands, April 24, 2001.
- Van Thiel, E., *(Dis)ordered motor control characterizing arm movements in cerebral palsy*. Katholieke Universiteit Nijmegen, The Netherlands, October 3, 2001.
- Nevin, C., *Initiation and control of gait from first principles: A mathematically animated model of the foot*. University of Cape Town, South- Africa, December, 2001.
- Jacobs, D. M., *On perceiving, acting, and learning. Toward an ecological approach anchored in convergence*. Vrije Universiteit Amsterdam, The Netherlands, January 17, 2002 (*cum laude*).
- Brouwer, A.-M., *The use of visual information in intercepting moving objects*. Erasmus Universiteit Rotterdam, The Netherlands, April 24, 2002.
- De Groot, S., *Hand rim wheelchair propulsion: Biophysical aspects of learning*. Vrije Universiteit Amsterdam, The Netherlands, November 28, 2003.
- Wisse, M., *Essentials of dynamic walking. Analysis and design of two-legged robots*. Technical University Delft, The Netherlands, September 22, 2004 (*cum laude*).
- Withagen, R., *On the functional specificity of calibration*. Vrije Universiteit Amsterdam, The Netherlands, February 23, 2005.
- Millieux, L., *La dynamique du recrutement et de la suppression des degrés de liberté dans les coordinations motrices. [Dynamics of recruitment/suppression of degrees of freedom in motor coordination]*. L' Université de la Méditerranée, Marseille, France, December 6, 2005.

- Villard, S., *Processus de synchronisation entre locomotion et respiration [The process of synchronisation between locomotion and respiration]*. L' Université de Montpellier I, Montpellier, France, December 7, 2005.
- Atchy-Dalama, P., *Approche dynamique de l'apprentissage: Pratique variable et rôle des informations sensorielles [Dynamical approach to learning: Variability of practice and the role of sensory information]*. Université Toulouse III – Paul Sabatier U.F.R. Staps, Toulouse, France, December 8, 2005.
- Heij, P., *Grondslagen van 'verantwoord' bewegingsonderwijs. Filosofische en pedagogische doordenking van relationeel gefundeerd bewegings-onderwijs*. Budel: Uitgeverij Damon BV. Vrije Universiteit Amsterdam, The Netherlands, June 21, 2006.
- Visser, J. E., *Basal ganglia and postural control*. Radboud Universiteit Nijmegen, The Netherlands, June 17, 2008.
- Lim, I., *Rehabilitation in Parkinson's disease: Strategies for cueing*. Vrije Universiteit Amsterdam, The Netherlands, May 19, 2009.
- Abrahamse, E. L., *Serial action and perception*. University of Twente, The Netherlands, January 28, 2010 (*cum laude*).
- Horlings, C. G. C., *A weak balance: Balance and falls in patients with neuromuscular disorders*. Radboud University Nijmegen, The Netherlands, April 1, 2010.
- Brink, M. S., *Balancing stress and recovery in sports*. Rijksuniversiteit Groningen, The Netherlands, December 6, 2010.
- Van der Werf, J., *Cortical oscillatory activity in human visuomotor integration*. Radboud Universiteit Nijmegen, The Netherlands, March 30, 2011.
- Mugge, W., *Reflex mechanisms in CRPS-related dystonia*. Technische Universiteit Delft, The Netherlands, June 22, 2011.
- Rey, F. P., *Le jonglage et les sciences. D'une étude pluridisciplinaire à une vision transdisciplinaire*. L'Université René Descartes – Paris V, November 23, 2011.
- Snijders, A. H., *Tackling freezing of gait in Parkinson's disease*. Radboud University Nijmegen, The Netherlands, June 4, 2012.
- Benjaminse, A., *Motor learning in ACL injury prevention*. Rijksuniversiteit Groningen, The Netherlands, November 9, 2015.
- Noël, B., *What the penalty taker should and should not know: How having too much information about the goalkeeper can hinder penalty kick performance*. Vrije Universiteit Amsterdam, March 2, 2016.
- Onneweer, B., *Is the force with you? On the accuracy of human force perception*. Technische Universiteit Delft, March 23, 2016.
- Van Dijk, L., *The reality of practice: an action systems approach to serious gaming*. Rijksuniversiteit Groningen, The Netherlands, November 23, 2016.
- Reijnierse, E. M., *Muscle matters! Recognizing the relevance of the ageing muscle*. Vrije Universiteit Amsterdam, April 3, 2017.
- Zult, T., *Inter-limb mechanisms and clinical relevance of cross-education in humans*. Rijksuniversiteit Groningen, The Netherlands, June 12, 2017.
- Mentzel, T. Q., *Capturing the cacophony of movement – Assessment, epidemiology and treatment of movement disorders in patients with psychotic disorders*. Universiteit Maastricht, The Netherlands, June 8, 2018.
- Cuijpers, L., *Interpersonal coordination dynamics in crew rowing*. Rijksuniversiteit Groningen, The Netherlands, September 9, 2019.
- Postma, D. B. W., *Affordance-based control in running to catch fly balls*. Rijksuniversiteit Groningen, The Netherlands, October 14, 2019.
- Maldini, I., *Can design confront consumerism?* Vrije Universiteit Amsterdam, The Netherlands, November 26, 2019.
- Jongbloed-Pereboom, M., *Learning by doing: Lessons learned on explicit and implicit motor learning in children*. Radboud Universiteit Nijmegen, The Netherlands, July 6, 2020.
- Finnicum, C. T., *Genetically informative designs for the study of health associated biomarkers*. Vrije Universiteit Amsterdam, The Netherlands, February 15, 2021.
- Van der Zee, M. D., *Molecular and behavioral genetic investigation of voluntary exercise behaviors*. Vrije Universiteit Amsterdam, The Netherlands, November 19, 2021.
- Kok, M., Vrije Universiteit Amsterdam, *Motor learning method matters in physical education. The Netherlands*, April 12, 2021.

#### Articles in refereed journals [324; H-index Web of Science = 65; H-index Google Scholar = 93]

1. Tamboer, J. W. I., Meijer, O. G., & Beek, P. J. (1980). Book review of "Meaning in movement, sport and physical education" (Arnold, P. J., Heinemann, 1979, pp. 200). *Journal of Human Movement Studies*, 6, 188-200. (DOI)
2. Beek, P. J., & Beek, W. J. (1988). Tools for constructing dynamical models of rhythmic movement. *Human Movement Science*, 7, 301-342. DOI: 10.1016/0167-9457(88)90015-2
3. Beek, P. J., & Beek, W. J. (1989). Stability and flexibility in the temporal organization of movements. *Human Movement Science*, 8, 347-356. DOI: 10.1016/0167-9457(89)90039-0
4. Beek, P. J. (1989). Timing and phase locking in cascade juggling. *Ecological Psychology*, 1, 55-96. DOI: 10.1207/s15326969eco0101\_4
5. Beek, P. J., & Bingham, G. P. (1991). Task-specific dynamics and the study of perception and action: A reaction to Von Hofsten (1989). *Ecological Psychology*, 3, 35-54. DOI: 10.1207/s15326969eco0301\_3
6. Beek, P. J., & Bootsma, R. J. (1991). Physical and informational principles in modelling movement behaviour. *Human Movement Science*, 10, 81-92. DOI: 10.1016/0167-9457(91)90033-T
7. Schmidt, R. C., Beek, P. J., Treffner, P., & Turvey, M. T. (1991). Dynamical substructure of coordinated rhythmic movement. *Journal of Experimental Psychology: Human Perception and Performance*, 17, 635-651. DOI: 10.1037/0096-1523.17.3.635
8. Beek, P. J., & Hopkins, B. (1991). Human Movement Sciences at the Vrije Universiteit Amsterdam. *International Journal of Physical Education*, 28(2), 27-31. (DOI)

9. Toussaint, H. M., & **Beek, P. J.** (1992). Biomechanics of competitive front crawl swimming. *Sports Medicine*, *13*, 8-24. DOI: 10.2165/00007256-199213010
10. Wimmers, R. H., **Beek, P. J.**, & Van Wieringen, P. C. W. (1992). Phase transitions in rhythmic tracking movements: A case of unilateral coupling. *Human Movement Science*, *11*, 217-226. DOI: 10.1016/0167-9457(92)90062-G
11. **Beek, P. J.** (1992). Inadequacies of the proportional duration model: Perspectives from a dynamical analysis of timing in juggling. *Human Movement Science*, *11*, 227-237. DOI: 10.1016/0167-9457(92)90063-H
12. **Beek, P. J.**, & Van Santvoord, A. A. M. (1992). Learning the cascade juggle: A dynamical systems analysis. *Journal of Motor Behavior*, *24*, 85-94. DOI: 10.1080/00222895.1992.9941604
13. **Beek, P. J.**, Turvey, M. T., & Schmidt, R. C. (1992). Autonomous and nonautonomous dynamics of coordinated rhythmic movements. *Ecological Psychology*, *4*, 65-95. DOI: 10.1207/s15326969eco0402\_1
14. **Beek, P. J.**, & Hopkins, B. (1992). Four requirements for a dynamical systems approach to the development of social coordination. *Human Movement Science*, *11*, 425-442. DOI: 10.1016/0167-9457(92)90022-4
15. Van Ingen Schenau, G. J., **Beek, P. J.**, & Bootsma, R. J. (1992). Is position information alone sufficient for the control of external forces? *Behavioral and Brain Sciences*, *15*, 804-805. (DOI)
16. **Beek, P. J.**, & Turvey, M. T. (1992). Temporal patterning in cascade juggling. *Journal of Experimental Psychology: Human Perception and Performance*, *18*, 934-947. DOI: 10.1037/0096-1523.18.4.934
17. **Beek, P. J.**, & Van Wieringen, P. C. W. (1994). Introduction (editorial). *Human Movement Science*, *13*, 297-300. (DOI)
18. **Beek, P. J.**, & Van Wieringen, P. C. W. (1994). Perspectives on the relation between information and dynamics: An epilogue. *Human Movement Science*, *13*, 519-533. (DOI)
19. Van Santvoord, A. A. M., & **Beek, P. J.** (1994). Phasing and the pick-up of optical information in cascade juggling. *Ecological Psychology*, *6*, 239-263. DOI: 10.1207/s15326969eco0604\_1F
20. **Beek, P. J.** (1994). Book Review of "Developing through relationships: Origins of self, communication and culture" (Fogel, A., University of Chicago Press, 1993, pp. 230). *Quarterly Review of Biology*, *69*, 575-576. (DOI)
21. Toussaint, H. M., Commissaris, D. A. C. M., Van Dieën, J. H., Reijnen, J. S., Praet, S. F. E., & **Beek, P. J.** (1995). A mechanical analysis of maintaining balance during lifting. *Journal of Motor Behavior*, *27*, 225-234. DOI: 10.1080/00222895.1995.9941712
22. Peper, C. E., **Beek, P. J.**, & Van Wieringen, P. C. W. (1995). Coupling strength in tapping a 2:3 polyrhythm. *Human Movement Science*, *14*, 217-245. DOI: 10.1016/0167-9457(95)00010-P
23. Peper, C. E., **Beek, P. J.**, & Van Wieringen, P. C. W. (1995). Frequency-induced transitions in bimanual tapping. *Biological Cybernetics*, *73*, 301-309. DOI: 10.1007/BF00199466
24. Peper, C. E., **Beek, P. J.**, & Van Wieringen, P. C. W. (1995). Multifrequency coordination in bimanual tapping: Asymmetric coupling and signs of supercriticality. *Journal of Experimental Psychology: Human Perception and Performance*, *21*, 1117-1138. DOI: 10.1037/0096-1523.21.5.1117
25. **Beek, P. J.**, & Lewbel, A. (1995). The science of juggling. *Scientific American*, *273*(5), 92-97. DOI: 10.1038/scientificamerican1195-92
26. **Beek, P. J.**, Peper, C. E., & Stegeman, D. F. (1995). Dynamical models of movement coordination. *Human Movement Science*, *14*, 573-608. DOI: 10.1016/0167-9457(95)00028-5
27. **Beek, P. J.**, Schmidt, R. C., Morris, A. W., Sim, M.-Y., & Turvey, M. T. (1995). Linear and nonlinear stiffness and friction in biological rhythmic movements. *Biological Cybernetics*, *73*, 499-507. DOI: 10.1007/s004220050205
28. Michaels, C. F., & **Beek, P. J.** (1995). The status of ecological psychology. *Ecological Psychology*, *7*, 259-278. (DOI)
29. Haken, H. H., Peper, C. E., **Beek, P. J.**, & Daffertshofer, A. (1996). A model for phase transitions in human hand movements during multifrequency tapping. *Physica D*, *90*, 179-196. DOI: 10.1016/0167-2789(95)00235-9
30. Van Santvoord, A. A. M., & **Beek, P. J.** (1996). Spatiotemporal variability in cascade juggling. *Acta Psychologica*, *91*, 131-151. DOI: 10.1016/0001-6918(94)00044-1
31. den Brinker, B. P. L. M., & **Beek, P. J.** (1996). Reading with magnifiers. *Ergonomics*, *39*, 1231-1248. (DOI)
32. **Beek, P. J.**, Rikkert, W. E. I., & Van Wieringen, P. C. W. (1996). Limit cycle properties of rhythmic forearm movements. *Journal of Experimental Psychology: Human Perception and Performance*, *22*, 1077-1093. (DOI)
33. Van Soest, A. J., & **Beek, P. J.** (1996). Perceptual-motor coupling in the execution of fast interceptive actions. *Corpus, Psyche et Societas*, *3*, 92-101. (DOI)
34. **Beek, P. J.**, Verschoor, F., & Kelso, J. A. S. (1997). Requirements for the emergence of a dynamical social psychology. *Psychological Inquiry*, *8*, 100-104. DOI: 10.1207/s15327965pli0802\_2
35. Toussaint, H. M., Commissaris, D. A. C. M., Hoozemans, M. J. M., Ober, M. J., & **Beek, P. J.** (1997). Anticipatory postural adjustments prior to load pick-up during a bimanual whole body lifting task. *Medicine and Science in Sports and Exercise*, *29*, 1208-1215. DOI: 10.1097/00005768-199709000-00014
36. Toussaint, H. M., Commissaris, D. A. C. M., & **Beek, P. J.** (1997). Anticipatory postural adjustments in the back and leg lift. *Medicine and Science in Sports and Exercise*, *29*, 1216-1224. DOI: 10.1097/00005768-199709000-00015
37. Van Wieringen, P. C. W., & **Beek, P. J.** (1997). Distance versus position information in the control of aiming movements. *Behavioral and Brain Sciences*, *20*, 323-324. DOI: 10.1017/S0140525X97441444
38. **Beek, P. J.**, Bobbert, M. F., de Groot, G., Hollander, A. P., & de Koning, J. J. (1998). Obituary - in memory of Gerrit Jan van Ingen Schenau. *Journal of Biomechanics*, *31*, R3-R4. (DOI)
39. Peper, C. E., & **Beek, P. J.** (1998). Distinguishing between the effects of frequency and amplitude on interlimb coupling in tapping a 2:3 polyrhythm. *Experimental Brain Research*, *118*, 78-92. DOI: 10.1007/s002210050257
40. Wimmers, R. H., **Beek, P. J.**, Savelsbergh, G. J. P., Hopkins, B. (1998). Developmental changes in action: Theoretical and methodological issues. *British Journal of Developmental Psychology*, *16*, 45-63. DOI 10.1111/j.2044-

41. Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1998). Evidence for a phase transition in the early development of prehension. *Developmental Psychobiology*, *32*, 235-248. (DOI)
42. Peper, C. E., & **Beek, P. J.** (1998). Are frequency-induced transitions in rhythmic coordination mediated by a drop in amplitude? *Biological Cybernetics*, *79*, 291-300. DOI: 10.1007/s004220050479
43. **Beek, P. J.**, & Amazeen, E. L. (1998). On the implications of Bernstein's analysis of dexterity for motor control. *Contemporary Psychology (PsycCritiques)*, *43*, 345-346. DOI: 10.1037/001644
44. **Beek, P. J.**, & Meijer, O. G. (1999). Spinal anticipation and cortical corrections: Coordination of movements (1930). *Motor Control*, *3*, 2-8. DOI: 10.1123/mcj.3.1.2
45. Bullock, D., Bongers, R. M., Lankhorst, M., & **Beek, P. J.** (1999). A vector-integration-to-endpoint model for performance of viapoint movements. *Neural Networks*, *12*, 1-29. DOI: 10.1016/S0893-6080(98)00109-9
46. Frank, T. D., Daffertshofer, A., **Beek, P. J.**, & Haken, H. (1999). Impacts of noise on a field theoretical model of the human brain. *Physica D*, *127*, 233-249. DOI: 10.1016/S0167-2789(98)00294-2
47. Daffertshofer, A., Van den Berg, C., & **Beek, P. J.** (1999). A dynamical model for mirror movements. *Physica D*, *2253*, 1-24. DOI: 10.1016/S0167-2789(99)00044-5
48. Peper, C. E., & **Beek, P. J.** (1999). Modeling rhythmic interlimb coordination: The roles of movement amplitude and time delays. *Human Movement Science*, *18*, 263-280. DOI: 10.1016/S0167-9457(99)00011-1
49. Amazeen, E. L., Amazeen, P. G., Post, A. A., & **Beek, P. J.** (1999). Timing the selection of visual information during rhythmic catching. *Journal of Motor Behavior*, *31*, 279-289. DOI: 10.1080/00222899909600994
50. Post, A. A., Daffertshofer, A., & **Beek, P. J.** (2000). Principal components in three-ball cascade juggling. *Biological Cybernetics*, *82*, 143-152. DOI: 10.1007/PL00007966
51. Oudejans, R. D., Verheijen, R., Bakker, F. C., Gerrits, J., Steinbrückner, M., & **Beek, P. J.** (2000). Errors in judging 'offside' in football. *Nature*, *404*, 33. DOI: 10.1038/35003639
52. Daffertshofer, A., Peper, C. E., & **Beek, P. J.** (2000). Spectral analyses of event-related encephalographic signals. *Physics Letters A*, *266*, 290-302. DOI: 10.1016/S0375-9601(99)00908-1
53. **Beek, P. J.** (2000). Toward a theory of implicit learning in the perceptual-motor domain. *International Journal of Sport Psychology*, *31*, 547-554. (DOI)
54. Frank, T. D., Daffertshofer, A., Peper, C. E., **Beek, P. J.**, & Haken, H. (2000). Towards a comprehensive theory of brain activity: Coupled oscillator systems under external forces. *Physica D*, *144*, 62-86. DOI: 10.1016/S0167-2789(00)00071-3
55. Van den Berg, C., **Beek, P. J.**, Wagenaar, R. C., & Van Wieringen, P. C. W. (2000). Coordination disorders in patients with Parkinson's disease: A study of paced rhythmic forearm movements. *Experimental Brain Research*, *134*, 174-186. DOI: 10.1007/s002210000441
56. Daffertshofer, A., Frank, T. D., Peper, C. E., & **Beek, P. J.** (2000). Three pertinent issues in the modelling of brain activity: Nonlinearities, time scales, and neural underpinnings. *Behavioral and Brain Sciences*, *23*, 400-401. DOI: 10.1017/S0140525X00233256
57. Post, A. A., Peper, C. E., Daffertshofer, A., & **Beek, P. J.** (2000). Relative phase dynamics in perturbed interlimb coordination: Stability and stochasticity. *Biological Cybernetics*, *83*, 443-459. DOI: 10.1007/s004220000177
58. Post, A. A., Peper, C. E., & **Beek, P. J.** (2000). Relative phase dynamics in perturbed interlimb coordination: The effects of frequency and amplitude. *Biological Cybernetics*, *83*, 529-542. DOI: 10.1007/s004220000185
59. Jagacinski, R. J., Peper, C. E., & **Beek, P. J.** (2000). Dynamic, stochastic, and topological aspects of polyrhythmic performance. *Journal of Motor Behavior*, *4*, 323-336. DOI: 10.1080/00222890009601383
60. Daffertshofer, A., Peper, C. E., Frank, T. D., & **Beek, P. J.** (2000). Spatio-temporal patterns of encephalographic signals during polyrhythmic tapping. *Human Movement Science*, *19*, 475-498. DOI: 10.1016/S0167-9457(00)00032-4
61. Frank, T. D., Daffertshofer, A., & **Beek, P. J.** (2001). Multivariate Ornstein-Uhlenbeck processes with mean field dependent coefficients: Application to postural sway. *Physical Review E*, *63* (Art. No. 011905; article reference only). DOI: 10.1103/PhysRevE.63.011905
62. Frank, T. D., Daffertshofer, A., Peper, C. E., **Beek, P. J.**, & Haken, H. (2001). H-theorem for a mean field describing coupled oscillators under external forces. *Physica D*, *150*, 219-236. DOI: 10.1016/S0167-2789(01)00151-8
63. Donker, S. F., **Beek, P. J.**, Wagenaar, R. C., & Mulder, T. (2001). Coordination between arm and leg movements during locomotion. *Journal of Motor Behavior*, *33*, 86-102. DOI: 10.1080/00222890109601905
64. Frank, T. D., & **Beek, P. J.** (2001). Stationary solutions of linear stochastic delay differential equations: Applications to biological systems. *Physical Review E*, *64* (Art. No. 021917; article reference only). DOI: 10.1103/PhysRevE.64.021917
65. Peper, C. E., & **Beek, P. J.** (2001). Direct perception of global invariants is not a fruitful notion. *Behavioral and Brain Sciences*, *24*, 235. (DOI)
66. Amazeen, E. L., Amazeen, P. G., & **Beek, P. J.** (2001). Eye movements and the selection of optical information for catching. *Ecological Psychology*, *13*, 71-85. DOI: 10.1207/S15326969ECO1302\_1
67. Amazeen, P. G., Amazeen, E. L., & **Beek, P. J.** (2001). Coupling of breathing and movement during manual wheelchair propulsion. *Journal of Experimental Psychology: Human Perception and Performance*, *27*, 1243-1259. DOI: 10.1037//0096-1523.27.5.1243
68. Frank, T. D., Daffertshofer, A., & **Beek, P. J.** (2001). Interpreting screw displacement apparent motion as a self-organizing process. *Behavioral and Brain Sciences*, *24*, 668. (DOI)
69. **Beek, P. J.**, Peper, C. E., & Daffertshofer, A. (2002). Modeling rhythmic interlimb coordination. Beyond the Haken-Kelso-Bunz model. *Brain and Cognition*, *48*, 149-165. DOI: 10.1006/brcg.2001.1310
70. Kingma, I., **Beek, P. J.**, & Van Dieën, J. H. (2002). The inertia tensor versus static moment and mass in perceiving

- length and heaviness of hand-wielded rods. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 180-191. DOI: 10.1037//0096-1523.28.1.180
71. Huys, R., & **Beek, P. J.** (2002). The coupling between point of gaze and ball movements in three-ball cascade juggling: The effects of expertise, pattern and tempo. *Journal of Sports Sciences*, 20, 1-16. DOI: 10.1080/026404102317284745
  72. Dessing, J. C., Bullock, D., Peper, C. E., & **Beek, P. J.** (2002). Prospective control of manual interceptive actions: Comparative simulations of extant and new model constructs. *Neural Networks*, 15, 163-179. DOI: 10.1016/S0893-6080(01)00136-8
  73. Lamoth, C., Meijer, O. G., Wuisman, P. I. J. M., Van Dieën, J. H., Levin, M. F., & **Beek, P. J.** (2002). Pelvis-thorax coordination in the transverse plane during walking in persons with nonspecific low back pain. *Spine*, 27, E92-E99. DOI: 10.1097/00007632-200202150-00016
  74. Donker, S. F., & **Beek, P. J.** (2002). Interlimb coordination in prosthetic walking: Effects of asymmetry and walking velocity. *Acta Psychologica*, 110, 265-288. DOI: 10.1016/S0001-6918(02)00037-9
  75. Frank, T. D., Daffertshofer, A., & **Beek, P. J.** (2002). Impacts of statistical feedback on the flexibility-accuracy trade-off in biological systems. *Journal of Biological Physics*, 28, 39-54. DOI: 10.1023/A:1016256613673
  76. Lamoth, C. J. C., **Beek, P. J.**, & Meijer, O. G. (2002). Pelvis-thorax coordination in the transverse plane during gait. *Gait & Posture*, 16, 101-114. DOI: 10.1016/S0966-6362(01)00146-1
  77. Wu, W. H., Meijer, O. G., Jutte, P. C., Uegaki, K., Lamoth, C. J. C., de Wolf, G. S., Van Dieën, J. H., Wuisman, P. I. J. M., Kwakkel, G., de Vries, J. I. P., & **Beek, P. J.** (2002). Gait in patients with pregnancy-related pain in the pelvis: An emphasis on the coordination of transverse pelvic and thoracic rotations. *Clinical Biomechanics*, 17, 678-686. DOI: 10.1016/S0268-0033(02)00109-2
  78. Post, A. A., Peper, C. E., & **Beek, P. J.** (2003). Effects of visual information and task constraints on intersegmental coordination in playground swinging. *Journal of Motor Behavior*, 35, 64-78. DOI: 10.1080/00222890309602122
  79. Huys, R., Daffertshofer, A., & **Beek, P. J.** (2003). Learning to juggle: On the assembly of functional subsystems into task-specific organizations. *Biological Cybernetics*, 88, 302-318. DOI: 10.1007/s00422-002-0379-1
  80. Frank, T. D., **Beek, P. J.**, & Friedrich, R. (2003). Fokker-Planck perspective on stochastic delay systems: Exact solutions and data analysis of biological systems. *Physical Review E*, 68, (Art. No. 021912; article reference only). DOI: 10.1103/PhysRevE.68.021912
  81. **Beek, P. J.**, Dessing, J. C., Peper, C. E., & Bullock, D. (2003). Modelling the control of interceptive actions. *Philosophical Transactions B: Biological Sciences. Proceedings of the Royal Society*, 358, 1511-1523. DOI: 10.1098/rstb.2003.1343
  82. Kingma, I., Van de Langenberg, R., & **Beek, P. J.** (2004). Which mechanical invariants are associated with the perception of extent and heaviness of handheld objects? Testing the inertia tensor hypothesis. *Journal of Experimental Psychology: Human Perception and Performance*, 30, 346-354. DOI: 10.1037/0096-1523.30.2.346
  83. Daffertshofer, A., Huys, R., & **Beek, P. J.** (2004). Dynamical coupling between locomotion and respiration. *Biological Cybernetics*, 90, 157-164. DOI: 10.1007/s00422-004-0462-x
  84. Huys, R., Daffertshofer, A., & **Beek, P. J.** (2004). Multiple time scales and multiform dynamics in learning to juggle. *Motor Control*, 8, 188-212. DOI: 10.1123/mcj.8.2.188
  85. Daffertshofer, A., Lamoth, C. J. C., Meijer, O. G., & **Beek, P. J.** (2004). PCA in studying coordination and variability: A tutorial. *Clinical Biomechanics*, 19, 415-428. DOI: 10.1016/j.clinbiomech.2004.01.005
  86. Huys, R., Daffertshofer, A., **Beek, P. J.**, Saunderson, D., & Siegmund, G. (2004). Locomotion-respiration coupling: An account of the underlying dynamics. *Journal of Applied Physiology*, 96, 2341-2342. DOI: 10.1152/jappphysiol.01341.2003
  87. Wu, W. H., Meijer, O. G., Lamoth, C. J. C., Uegaki, K., Van Dieën, J. H., Harlaar, J., Wuisman, P. I. J. M., de Vries, J. I. P., & **Beek, P. J.** (2004). Gait coordination in pregnancy: Transverse pelvic and thoracic rotations and their relative phase. *Clinical Biomechanics*, 19, 480-488. DOI: 10.1016/j.clinbiomech.2004.02.003
  88. Lamoth, C. J. C., Daffertshofer, A., Meijer, O. G., Moseley, G., Wuisman, P. I. J. M., & **Beek, P. J.** (2004). Effects of pain and fear of pain on trunk coordination during walking: Method and data. *Clinical Biomechanics*, 19, 551-563. DOI: 10.1016/j.clinbiomech.2003.10.006
  89. Frank, T. D., **Beek, P. J.**, & Friedrich, R. (2004). Identifying noise sources of time-delayed feedback systems. *Physics Letters A*, 328, 219-224. DOI: 10.1016/j.physleta.2004.06.012
  90. Dessing, J. C., Peper, C. E., & **Beek, P. J.** (2004). A comparison of real catching with catching using stereoscopic visual displays. *Ecological Psychology*, 16, 1-21. DOI: 10.1207/s15326969eco1601\_1
  91. **Beek, P. J.**, & Peper, C. E. (2004). Perceptual goals matter, but let's not overdo it! *Journal of Motor Behavior*, 36, 373-375. DOI: 10.1080/00222895.2004.11007995
  92. Van Mourik, A., & **Beek, P. J.** (2004). Discrete and cyclical movements: Unified dynamics or separate control? *Acta Psychologica*, 117, 121-138. DOI: 10.1016/j.actpsy.2004.06.001
  93. Ridderikhoff, A., Peper, C. E., Carson, R. G., & **Beek, P. J.** (2004). Effector dynamics of rhythmic wrist activity and its implications for (modeling) bimanual coordination. *Human Movement Science*, 23, 285-313. DOI: 10.1016/j.humov.2004.08.008
  94. Huys, R., Daffertshofer, A., & **Beek, P. J.** (2004). Multiple time scales and subsystem dynamics in the learning of juggling. *Human Movement Science*, 23, 315-336. DOI: 10.1016/j.humov.2004.08.009
  95. Peper, C. E., Ridderikhoff, A., Daffertshofer, A., & **Beek, P. J.** (2004). Explanatory limitations of the HKB model: Incentives for a two-tiered model of rhythmic interlimb coordination. *Human Movement Science*, 23, 673-697. DOI: 10.1016/j.humov.2004.10.007
  96. Dessing, J. C., Caljouw, S., Peper, C. E., & **Beek, P. J.** (2004). A dynamical neural network for hitting an approaching object. *Biological Cybernetics*, 91, 377-387. DOI: 10.1007/s00422-004-0520-4

97. Wing, A. M., & **Beek, P. J.** (2004). Motion analysis: A joint centenary. *Human Movement Science*, 23, III-IV. DOI: 10.1016/j.humov.2004.11.00
98. Daffertshofer, A., Peper, C. E., & **Beek, P. J.** (2005). Stabilization of bimanual coordination due to active interhemispheric inhibition: A theoretical interpretation. *Biological Cybernetics*, 92, 101-109. DOI: 10.1007/s00422-004-0539-6
99. Frank, T. D., Friedrich, R., & **Beek, P. J.** (2005). Identifying and comparing states of time-delayed systems: Phase diagrams and applications to human motor control systems. *Physics Letters A*, 338, 74-80. DOI: 10.1016/j.physleta.2005.01.091
100. Dessing, J. C., Peper, C. E., Bullock, D., & **Beek, P. J.** (2005). How position, velocity and temporal information combine in the prospective control of catching: Data and model. *Journal of Cognitive Neuroscience*, 17, 668-686. DOI: 10.1162/0898929053467604
101. Atchy-Dalama, P., Peper, C. E., Zanone, P. G., & **Beek, P. J.** (2005). Movement-related sensory feedback mediates the learning of a new bimanual relative phase pattern. *Journal of Motor Behavior*, 37, 186-196. DOI: 10.3200/JMBR.37.3.186-196
102. Donker, S. F., Daffertshofer, A. & **Beek, P. J.** (2005). Effects of velocity and limb loading on the coordination between limb movements during walking. *Journal of Motor Behavior*, 37, 217-230.. DOI: 10.3200/JMBR.37.3.217-230
103. Ridderikhoff, A., Daffertshofer, A., Peper, C. E., & **Beek, P. J.** (2005). Mirrored EMG activity during unimanual rhythmic movements. *Neuroscience Letters*, 381, 228-233. DOI: 10.1016/j.neulet.2005.02.041
104. Boonstra, T. W., Clairbois, H. E., Daffertshofer, A., Verbunt, J., Van Dijk, B. W., & **Beek, P. J.** (2005). MEG-compatible force sensor. *Journal of Neuroscience Methods*, 144, 193-196. DOI: 10.1016/j.jneumeth.2004.11.004
105. Oudejans, R. R. D., Bakker, F. C., Verheijen, R., Gerrits, J. C., Steinbrückner, M., & **Beek, P. J.** (2005). How position and motion of expert assistant referees in soccer relate to the quality of their offside judgements during actual match play. *International Journal of Sport Psychology*, 36, 3-21. (DOI)
106. Frank, T. D., Friedrich, R., & **Beek, P. J.** (2005). Time series analysis of multivariate time-delayed systems with noise: Applications to laser physics and human movement. *Stochastics and Dynamics*, 5, 297-306. DOI: 10.1142/S0219493705001456
107. Roerdink, M., Peper, C. E., & **Beek, P. J.** (2005). Effects of correct and transformed visual feedback on rhythmic visuo-motor tracking: Tracking performance and visual search behavior. *Human Movement Science*, 24, 379-402. DOI: 10.1016/j.humov.2005.06.007
108. Huys, R., Williams, A. M., & **Beek, P. J.** (2005). Visual perception and gaze control in judging versus producing phase relations. *Human Movement Science*, 24, 403-428. DOI: 10.1016/j.humov.2005.07.004
109. Boonstra, T. W., Daffertshofer, A., & **Beek, P. J.** (2005). Effects of sleep deprivation on event-related fields and alpha activity during rhythmic force production. *Neuroscience Letters*, 388, 27-32. DOI: 10.1016/j.neulet.2005.06.045
110. Ridderikhoff, A., Peper, C. E., & **Beek, P. J.** (2005). Unraveling interlimb interactions underlying bimanual coordination. *Journal of Neurophysiology*, 94, 3112-3125. DOI:10.1152/jn.01077.2004
111. Frank, T. D., & **Beek, P. J.** (2005). Fokker-Planck equations for globally coupled many-body systems with time delays. *Journal of Statistical Mechanics: Theory and Experiment*, 10, Art. No. P10010 (first page reference only). DOI: [10.1088/1742-5468/2005/10/P10010](https://doi.org/10.1088/1742-5468/2005/10/P10010)
112. Selen, L. P. J., **Beek, P. J.**, & Van Dieën, J. H. (2005). Can co-activation reduce kinematic variability? A simulation study. *Biological Cybernetics*, 93, 373-381. DOI: [10.1007/s00422-005-0015-y](https://doi.org/10.1007/s00422-005-0015-y)
113. Lamoth, C. J. C., Daffertshofer, A., Meijer, O. G., & **Beek, P. J.** (2006). How do persons with chronic low back pain speed up and slow down? Trunk-pelvis coordination and lumbar erector spinae activity during gait. *Gait & Posture*, 23, 230-239. [ESMAC 2004 Best Paper Award] DOI: [10.1016/j.gaitpost.2005.02.006](https://doi.org/10.1016/j.gaitpost.2005.02.006)
114. de Poel, H. J., Peper, C. E., & **Beek, P. J.** (2006). Intentional switches between bimanual coordination patterns are primarily effectuated by the non-dominant hand. *Motor Control*, 10, 7-23. DOI: [10.1123/mcj.10.1.7](https://doi.org/10.1123/mcj.10.1.7)
115. Van Mourik, A. M., Daffertshofer, A., & **Beek, P. J.** (2006). Estimating Kramers-Moyal coefficients in short and non-stationary data sets. *Physics Letters A*, 351, 13-17. DOI: [10.1016/j.physleta.2005.10.066](https://doi.org/10.1016/j.physleta.2005.10.066)

116. Lamoth, C. J. C., Meijer, O. G., Daffertshofer, A., Wuisman, P. I. J. M., & **Beek, P. J.** (2006). Effects of chronic low back pain on trunk coordination and back muscle activity during walking: Changes in motor control. *European Spine Journal*, *15*, 23-40. DOI: [10.1007/s00586-004-0825-y](https://doi.org/10.1007/s00586-004-0825-y)
117. Patanarapeelert, K., Frank, T. D., Friedrich, R., **Beek, P. J.**, & Tang, I. M. (2006). Theoretical analysis of destabilization resonances in time-delay stochastic second-order dynamical systems and some implications for human motor control. *Physical Review E*, *73* (Art. No. 021901; article reference only). DOI: [10.1103/PhysRevE.73.021901](https://doi.org/10.1103/PhysRevE.73.021901)
118. Van Mourik, A. M., Daffertshofer, A., & **Beek, P. J.** (2006). Deterministic and stochastic features of rhythmic human movement. *Biological Cybernetics*, *94*, 233-244. DOI: [10.1007/s00422-005-0041-9](https://doi.org/10.1007/s00422-005-0041-9)
119. Ridderikhoff, A., Peper, C. E., & **Beek, P. J.** (2006). Bilateral phase entrainment by movement-elicited afference contributes equally to the stability of in-phase and antiphase coordination. *Neuroscience Letters*, *399*, 71-75. DOI: [10.1016/j.neulet.2006.01.026](https://doi.org/10.1016/j.neulet.2006.01.026)
120. Selen, L. P. J., Beek, P. J., & Van Dieën, J. H. (2006). Impedance is modulated to meet accuracy demands during goal directed arm movements. *Experimental Brain Research*, *172*, 129-138. DOI: [10.1007/s00221-005-0320-7](https://doi.org/10.1007/s00221-005-0320-7)
121. Ponsen, M. M., Daffertshofer, A., Van den Heuvel, E., Wolters, E. Ch., Beek, P. J., & Berendse, H. W. (2006). Bimanual coordination dysfunction in early, untreated Parkinson's disease. *Parkinsonism & Related Disorders*, *12*, 246-252. DOI: [10.1016/j.parkreldis.2006.01.006](https://doi.org/10.1016/j.parkreldis.2006.01.006)
122. de Oliveira, R. F., Oudejans, R. R. D., & Beek, P. J. (2006). Late information pick-up is preferred in basketball jump shooting. *Journal of Sports Sciences*, *24*, 933-940. DOI: [10.1080/02640410500357101](https://doi.org/10.1080/02640410500357101)
123. Roerdink, M., de Haart, M., Donker, S. F., Daffertshofer, A., Geurts, A. C. H., & Beek, P. J. (2006). Dynamical structure of center-of-pressure trajectories in stroke patients during rehabilitation. *Experimental Brain Research*, *174*, 256-269. DOI: [10.1007/s00221-006-0441-7](https://doi.org/10.1007/s00221-006-0441-7)
124. Boonstra, T. W., Daffertshofer, A., Peper, C. E., & Beek, P. J. (2006). Amplitude and phase dynamics associated with acoustically-paced finger tapping. *Brain Research*, *1109*, 60-69. DOI: [10.1016/j.brainres.2006.06.039](https://doi.org/10.1016/j.brainres.2006.06.039)
125. Pijpers, J. R., Oudejans, R. R. D., Bakker, F. C., & Beek, P. J. (2006). The role of anxiety in perceiving and realizing affordances. *Ecological Psychology*, *18*, 131-161. DOI: [10.1207/s15326969eco1803\\_1](https://doi.org/10.1207/s15326969eco1803_1)
126. Van de Langenberg, R., Kingma, I., & **Beek, P. J.** (2006). Mechanical invariants are implicated in dynamic touch as a function of their salience in the stimulus flow. *Journal of Experimental Psychology: Human Perception and Performance*, *32*, 1093-1106. DOI: [10.1037/0096-1523.32.5.1093](https://doi.org/10.1037/0096-1523.32.5.1093)
127. Patanarapeelert, K., Frank, T. D., Friedrich, R., **Beek, P. J.**, & Tang, I. M. (2006). A data analysis method for identifying deterministic components of stable and unstable time delayed systems with colored noise. *Physics Letters A*, *360*, 190-198. DOI: [10.1016/j.physleta.2006.08.003](https://doi.org/10.1016/j.physleta.2006.08.003)
128. Selen, L., Van Dieën, J. H., & **Beek, P. J.** (2006). Impedance modulation and feedback corrections in tracking targets of variable size and frequency. *Journal of Neurophysiology*, *96*, 2750-2759. DOI: [10.1152/jn.00552.0556](https://doi.org/10.1152/jn.00552.0556)
129. Frank, T. D., Friedrich, R., & **Beek, P. J.** (2006). Stochastic order parameter equation of isometric force production revealed by drift-diffusion estimates. *Physical Review E*, *74* (Art. No. 051905; article reference only). DOI: [10.1103/PhysRevE.74.051905](https://doi.org/10.1103/PhysRevE.74.051905)
130. de Poel, H. J., Peper, C. E., & **Beek, P. J.** (2007). Handedness-related asymmetry in coupling strength in bimanual coordination: Furthering theory and evidence. *Acta Psychologica*, *124*, 209-237. DOI: [10.1016/j.actpsy.2006.03.003](https://doi.org/10.1016/j.actpsy.2006.03.003)
131. Boonstra, T. W., Daffertshofer, A., Van As, E., Van der Vlugt, S., & **Beek, P. J.** (2007). Bilateral motor unit synchronization is functionally organized. *Experimental Brain Research*, *178*, 79-88. DOI: [10.1007/s00221-006-0713-2](https://doi.org/10.1007/s00221-006-0713-2)
132. Vardy, A. N., Daffertshofer, A., Ridderikhoff, A., & **Beek, P. J.** (2007). Differential after-effects of bimanual activity on mirror movements. *Neuroscience Letters*, *42*, 117-122. DOI: [10.1016/j.neulet.2007.01.064](https://doi.org/10.1016/j.neulet.2007.01.064)
133. Oudejans, R. R. D., Bakker, F. C., & **Beek, P. J.** (2007). Helsen, Gillis, and Weston (2006) err in testing the optical error hypothesis. *Journal of Sports Sciences*, *25*, 987-990. DOI: [10.1080/02640410600778610](https://doi.org/10.1080/02640410600778610)
134. Boonstra, T. W., Daffertshofer, A., Breakspear, M., & **Beek, P. J.** (2007). Multivariate time-frequency analysis of electromagnetic brain activity during bimanual motor learning. *NeuroImage*, *36*, 370-377. DOI: [10.1016/j.neuroimage.2007.03.012](https://doi.org/10.1016/j.neuroimage.2007.03.012)
135. Boonstra, T. W., Stins, J. F., Daffertshofer, A., & **Beek, P. J.** (2007). Effects of sleep deprivation on neural functioning: An integrative review. *Cellular and Molecular Life Sciences*, *64*, 934-946. DOI: [10.1007/s00018-007-6457-8](https://doi.org/10.1007/s00018-007-6457-8)
136. de Oliveira, R. F., Huys, R., Oudejans, R. R. D., & **Beek, P. J.** (2007). Basketball jump shooting is controlled on-line by vision. *Experimental Psychology*, *54*, 180-186. DOI: [10.1027/1618-3169.54.3.180](https://doi.org/10.1027/1618-3169.54.3.180)
137. Post, A. A., de Groot, G., Daffertshofer, A., & **Beek, P. J.** (2007). Pumping a playground swing. *Motor Control*, *11*, 136-150. DOI: [10.1123/mcj.11.2.136](https://doi.org/10.1123/mcj.11.2.136)
138. Van de Langenberg, R., Kingma, I., & **Beek, P. J.** (2007). Perception of limb orientation in the vertical plane depends on center of mass rather than inertial eigenvectors. *Experimental Brain Research*, *180*, 595-607. DOI: [10.1007/s00221-007-0891-6](https://doi.org/10.1007/s00221-007-0891-6)
139. Donker, S. F., Roerdink, M., Greven, A. J., & **Beek, P. J.** (2007). Regularity of center-of-pressure trajectories depends on the amount of attention invested in postural control. *Experimental Brain Research*, *181*, 1-11. DOI: [10.1007/s00221-007-0905-4](https://doi.org/10.1007/s00221-007-0905-4)
140. Ridderikhoff, A., Peper, C. E., & **Beek, P. J.** (2007). Error correction in bimanual coordination benefits from bilateral muscle activity: Evidence from kinesthetic tracking. *Experimental Brain Research*, *181*, 31-48. DOI: [10.1007/s00221-007-0902-7](https://doi.org/10.1007/s00221-007-0902-7)

141. Selen, L. P., **Beek, P. J.**, & Van Dieën, J. H. (2007). Fatigue-induced changes of impedance and performance in target tracking. *Experimental Brain Research*, *181*, 99-108. DOI: [10.1007/s00221-007-0909-0](https://doi.org/10.1007/s00221-007-0909-0)
142. Koedijker, J. M., Oudejans, R. R. D., & **Beek, P. J.** (2007). Explicit rules and direction of attention in learning and performing the table tennis forehand. *International Journal of Sport Psychology*, *38*, 227-244.
143. Roerdink, M., Lamothe, C. J. C., Kwakkel, G., Van Wieringen, P. C. W., & **Beek, P. J.** (2007). Gait coordination after stroke: Benefits of acoustically paced treadmill walking. *Physical Therapy*, *87*, 1009-1022. DOI: [10.2522/ptj.20050394](https://doi.org/10.2522/ptj.20050394)
144. Dessing, J. C., Daffertshofer, A., Peper, C. E., & **Beek, P. J.** (2007). Pattern stability and error correction during in-phase and anti-phase four ball juggling. *Journal of Motor Behavior*, *39*, 433-446. DOI: [10.3200/JMBR.39.5.433-448](https://doi.org/10.3200/JMBR.39.5.433-448)
145. Wilmer, A., Frank, T. D., **Beek, P. J.**, & Friedrich, R. (2007). A data-analysis method for identifying differential effects of time- delayed feedback forces and periodic driving forces in stochastic systems. *European Physical Journal B*, *60*, 203-215. DOI: [10.1140/epjb/e2007-00333-x](https://doi.org/10.1140/epjb/e2007-00333-x)
146. Stins, J. F., & **Beek, P. J.** (2007). Effects of picture viewing on postural control. *BMC Neuroscience*, *8*, Art. No. 83 (e-journal). DOI: [10.1186/1471-2202-8-83](https://doi.org/10.1186/1471-2202-8-83)
147. Roerdink, M., Ophoff, E. D., Peper, C. E., & **Beek, P. J.** (2008). Visual and musculoskeletal underpinnings of anchoring in rhythmic visuo-motor tracking. *Experimental Brain Research*, *184*, 143-156. DOI: [10.1007/s00221-007-1085-y](https://doi.org/10.1007/s00221-007-1085-y)
148. Donker, S. F., Ledebt, A., Roerdink, M., Savelsbergh, G. J. P., & **Beek, P. J.** (2008). Children with cerebral palsy exhibit greater and more regular sway than typically developing children. *Experimental Brain Research*, *148*, 363-370. DOI: [10.1007/s00221-007-1105-y](https://doi.org/10.1007/s00221-007-1105-y)
149. de Poel, H. J., Peper, C. E., & **Beek, P. J.** (2008). Laterally focused attention modulates asymmetric coupling in rhythmic interlimb coordination. *Psychological Research*, *72*, 123-137. DOI: [10.1007/s00426-006-0096-9](https://doi.org/10.1007/s00426-006-0096-9)
150. Oudejans, R. R. D., Koedijker, J. M., & **Beek, P. J.** (2008). An outside view on Wulf's external focus of attention: Three recommendations. *Bewegung und Training* (E-journal).
151. Van Ulzen, N. R., Semin, G. R., Oudejans, R. R., & **Beek, P. J.** (2008). Affective stimulus properties influence size perception and the Ebbinghaus illusion. *Psychological Research*, *72*, 304-310. DOI: [10.1007/s00426-007-0114-6](https://doi.org/10.1007/s00426-007-0114-6)
152. Van Ulzen, N. R., Lamothe, C. J. C., Daffertshofer, A., Semin, G. R., & **Beek, P. J.** (2008). Characteristics of instructed and uninstructed interpersonal coordination while walking side-by-side. *Neuroscience Letters*, *432*, 88-93. DOI: [10.1016/j.neulet.2007.11.070](https://doi.org/10.1016/j.neulet.2007.11.070)
153. Ponsen, M. M., Daffertshofer, A., Wolters, E. Ch., **Beek, P. J.**, & Berendse, H. (2008). Impairment of complex upper limb motor function in *de novo* Parkinson's disease. *Parkinsonism & Related Disorders*, *14*, 199-204. DOI: [10.1016/j.parkreldis.2007.07.019](https://doi.org/10.1016/j.parkreldis.2007.07.019)
154. Lamothe, C. J. C., Stins, J. F., Pont, M., Kerckhoff, F., & **Beek, P. J.** (2008). Effects of attention on the control of locomotion in individuals with chronic low back pain. *Journal of Neuroengineering and Rehabilitation*, *5*, Art. No. 13 (E-journal). DOI: [10.1186/1743-0003-5-13](https://doi.org/10.1186/1743-0003-5-13)
155. Peper, C. E., de Boer, B. J., de Poel, H. J., & **Beek, P. J.** (2008). Interlimb coupling strength scales with movement amplitude. *Neuroscience Letters*, *437*, 10-14. DOI: [10.1016/j.neulet.2008.03.066](https://doi.org/10.1016/j.neulet.2008.03.066)
156. Van Mourik, A. M., Daffertshofer, A., & **Beek, P. J.** (2008). Extracting dynamics from the stochastics of rhythmic forearm movements. *Journal of Motor Behavior*, *40*, 214-231. DOI: [10.3200/JMBR.40.3.214-231](https://doi.org/10.3200/JMBR.40.3.214-231)
157. Frank, T. D., Patanarapeelert, K., & **Beek, P. J.** (2008). Portfolio theory of optimal isometric force production: Variability predictions and nonequilibrium fluctuation-dissipation theorem. *Physics Letters A*, *372*, 3562-3568. DOI: [10.1016/j.physleta.2008.02.031](https://doi.org/10.1016/j.physleta.2008.02.031)
158. Houweling, S., Daffertshofer, A., Van Dijk, B. W., & **Beek, P. J.** (2008). Neural changes induced by learning a challenging perceptual-motor task. *NeuroImage*, *41*, 1395-1407. DOI: [10.1016/j.neuroimage.2008.03.023](https://doi.org/10.1016/j.neuroimage.2008.03.023)
159. Van de Langenberg, R., Kingma, I., & **Beek, P. J.** (2008). The perception of limb orientation depends on the center of mass. *Journal of Experimental Psychology: Human Perception and Performance*, *34*, 624-639. DOI: [10.1037/0096-1523.34.3.624](https://doi.org/10.1037/0096-1523.34.3.624)
160. Roerdink, M., Coolen, H., Clairbois, H. C., Lamothe, C. J. C., & **Beek, P. J.** (2008) Online gait event detection using a large force platform embedded in a treadmill. *Journal of Biomechanics*, *41*, 2628-2632. DOI: [10.1016/j.jbiomech.2008.0.023](https://doi.org/10.1016/j.jbiomech.2008.0.023)
161. Boonstra, T. W., Daffertshofer, A., Van Ditshuiszen, J. C., Van den Heuvel, M. R. C., Hofman, C. Willigenburg, N. W., & **Beek, P. J.** (2008). Fatigue-related changes in motor-unit synchronization of quadriceps muscles within and across legs. *Journal of Electromyography and Kinesiology*, *18*, 717-731. DOI: [10.1016/j.jelekin.2007.03.005](https://doi.org/10.1016/j.jelekin.2007.03.005)
162. Wu, W., Meijer, O. G., Bruijn, S. M., Hu, H., Van Dieën, J. H., Lamothe, C. J. C., Van Royen, B. J., & **Beek, P. J.** (2008). Gait in Pregnancy-related Pelvic girdle Pain (PPP): Amplitudes, timing, and coordination of horizontal trunk rotations. *European Spine Journal*, *17*, 1160-1169. DOI: [10.1007/s00586-008-0703-0](https://doi.org/10.1007/s00586-008-0703-0)
163. de Oliveira, R. F., Oudejans, R. R. D., & **Beek, P. J.** (2008). Gaze behavior in basketball shooting: Further evidence for online visual control. *Research Quarterly for Exercise and Sport*, *79*, 399-404.
164. Huys, R., Smeeton, N. J., Hodges, N. J., **Beek, P. J.**, & Williams, A. M. (2008). On the dynamic information underlying visual anticipation skill in perceiving tennis shots. *Perception and Psychophysics*, *70*, 1217-1234. DOI: [10.3758/PP.70.7.1217](https://doi.org/10.3758/PP.70.7.1217)
165. Koedijker, J. M., Oudejans, R. R. D., & **Beek, P. J.** (2008). Rule formation and table tennis performance following explicit and analogy learning over 10,000 repetitions. *International Journal of Sport Psychology*, *39*, 237-256.
166. Boonstra, T. W., Roerdink, M., Daffertshofer, A., Van Vugt, B., Van Werven, G., & **Beek, P. J.** (2008). Low-alcohol doses reduce common 10-15 Hz input to bilateral leg muscles during quiet standing. *Journal of Neurophysiology*, *100*, 2158-2164. DOI: [10.1152/jn.90474.2008](https://doi.org/10.1152/jn.90474.2008)

167. Ridderikhoff, A., Peper, C. E., & **Beek, P. J.** (2008). Attentional loads associated with interlimb interactions underlying rhythmic bimanual coordination. *Cognition*, *109*, 372-388. DOI: [10.1016/j.cognition.2008.10.002](https://doi.org/10.1016/j.cognition.2008.10.002)
168. Vardy, A. N., Daffertshofer, A., & **Beek, P. J.** (2009). Tapping with intentional drift. *Experimental Brain Research*, *192*, 615-625. DOI: [10.1007/s00221-008-1576-5](https://doi.org/10.1007/s00221-008-1576-5)
169. Dessing, J. C., Oostwoud Wijdenes, L., Peper, C. E., & **Beek, P. J.** (2009). Adaptations of lateral hand movements to early and late visual occlusion in catching. *Experimental Brain Research*, *192*, 669-682. DOI: [10.1007/s00221-008-1588-1](https://doi.org/10.1007/s00221-008-1588-1)
170. Boonstra, T. W., Daffertshofer, A., Roerdink, M., Flipse, I., Groenewoud, K., & **Beek, P. J.** (2009). Bilateral motor unit synchronization of leg muscles during a simple dynamic balance task. *European Journal of Neuroscience*, *29*, 613-622. DOI: [10.1111/j.1460-9568.2008.06584.x](https://doi.org/10.1111/j.1460-9568.2008.06584.x)
171. Huys, R., Cañal-Bruland, R., Hagemann, N., **Beek, P. J.**, Smeeton, N. J., & Williams, A. M. (2009). Global information pick up underpins anticipation of tennis shot direction. *Journal of Motor Behavior*, *41*, 158-170. DOI: [10.3200/JMBR.41.2.158-171](https://doi.org/10.3200/JMBR.41.2.158-171)
172. Roerdink, M., Geurts, A. C. H., de Haart, M., & **Beek, P. J.** (2009). On the relative contribution of the paretic leg to the control of posture after stroke. *Neurorehabilitation and Neural Repair*, *23*, 267-274. DOI: [10.1177/1545968308323928](https://doi.org/10.1177/1545968308323928)
173. **Beek, P. J.** (2009). Ecological approaches to sport psychology: Prospects and challenges. *International Journal of Sport Psychology*, *40*, 144-151.
174. Kistemaker, D. A., Faber, H., & **Beek, P. J.** (2009). Catching fly balls: A simulation of the Chapman strategy. *Human Movement Science*, *28*, 236-249. DOI: [10.1016/j.humov.2008.11.001](https://doi.org/10.1016/j.humov.2008.11.001)
175. Van den Heuvel, M. R. C., Balasubramaniam, R., Daffertshofer, A., Longtin, A., & **Beek, P. J.** (2009). Delayed visual feedback reveals distinct time scales in balance control. *Neuroscience Letters*, *452*, 37-41. DOI: [10.1016/j.neulet.2009.01.024](https://doi.org/10.1016/j.neulet.2009.01.024)
176. Bruijn, S. M., Van Dieën, J. H., Meijer, O. G., & **Beek, P. J.** (2009). Statistical precision and sensitivity of measures of dynamic gait stability. *Journal of Neuroscience Methods*, *178*, 327-333. DOI: [10.1016/j.jneumeth.2008.12.015](https://doi.org/10.1016/j.jneumeth.2008.12.015)
177. Lamoth, C. J. C., Van Lummel, R. C., A., & **Beek, P. J.** (2009). Athletic skill level is reflected in body sway: A test case for accelerometry in combination with stochastic dynamics. *Gait & Posture*, *29*, 546-551. DOI: [10.1016/j.gaitpost.2008.12.006](https://doi.org/10.1016/j.gaitpost.2008.12.006)
178. de Oliveira, R. F., Oudejans, R. R. D., & **Beek, P. J.** (2009). Experts appear to use angle of elevation in basketball shooting. *Journal of Experimental Psychology: Human Perception and Performance*, *35*, 750-761. DOI: [10.1037/a0013709](https://doi.org/10.1037/a0013709)
179. de Poel, H. J., Peper, C. E., & **Beek, P. J.** (2009). Disentangling the effects of attentional and amplitude asymmetries on relative phase dynamics, *35*, 762-777, *Journal of Experimental Psychology: Human Perception and Performance*. DOI: [10.1037/a0013549](https://doi.org/10.1037/a0013549)
180. Stins, J. F., Michielsen, M., Roerdink, M., & **Beek, P. J.** (2009). Sway regularity reflects attentional involvement in postural control: Effects of expertise, vision and cognition. *Gait & Posture*, *30*, 106-109. DOI: [10.1016/j.gaitpost.2009.04.001](https://doi.org/10.1016/j.gaitpost.2009.04.001)
181. Dessing, J. C., Oostwoud Wijdenes, L., Peper, C. E., & **Beek, P. J.** (2009). Visuomotor transformation for interception: Catching while fixating. *Experimental Brain Research*, *196*, 511-527. DOI: [10.1007/s00221-009-1882-6](https://doi.org/10.1007/s00221-009-1882-6)
182. Bruijn, S. M., Van Dieën, J. H., Meijer, O. G., & **Beek, P. J.** (2009). Is slow walking more stable? *Journal of Biomechanics*, *42*, 1506-1512. DOI: [10.1016/j.jbiomech.2008.0.023](https://doi.org/10.1016/j.jbiomech.2008.0.023)
183. Lamoth, C. J. C., Daffertshofer, A., Huys, R., & **Beek, P. J.** (2009). Steady and transient coordination structures of walking and running. *Human Movement Science*, *28*, 371-386. DOI: [10.1016/j.humov.2009.03.047](https://doi.org/10.1016/j.humov.2009.03.047)
184. Roerdink, M., Lamoth, C. J. C., Van Kordelaar, J., Elich, P., Konijnenbelt, M., Kwakkel, G., & **Beek, P. J.** (2009). Rhythm perturbations in acoustically-paced treadmill walking after stroke. *Neurorehabilitation and Neural Repair*, *23*, 668-678. DOI: [10.1177/1545968309332879](https://doi.org/10.1177/1545968309332879)
185. Emck, C., Bosscher, R. J., **Beek, P. J.**, Doreleijers, Th. (2009). Gross motor performance and self-perceived motor competence of children with psychiatric disorders. A review. *Developmental Medicine and Child Neurology*, *51*, 501-517. DOI: [10.1111/j.1469-8749.2009.03337.x](https://doi.org/10.1111/j.1469-8749.2009.03337.x)
186. Stins, J. F., Ledebt, A., Emck, C., Van Dokkum, E. H., & **Beek, P. J.** (2009). Patterns of postural sway in high anxious children. *Behavioral and Brain Functions*, *5*, 42. (E-journal). DOI: [10.1186/1744-9081-5-42](https://doi.org/10.1186/1744-9081-5-42)
187. Swart, K., Stins, J., & **Beek, P. J.** (2009). Cortical changes in complex regional pain syndrome (CRPS). *European Journal of Pain*, *13*, 902-907. DOI: [10.1016/j.ejpain.2008.11.010](https://doi.org/10.1016/j.ejpain.2008.11.010)
188. Van Delden, A. E. Q., Peper, C. E., Kwakkel, G., Harlaar, J., Daffertshofer, A., Zijp, N., Nienhuys, K., Koppe, P., & **Beek, P. J.** (2009). Comparing unilateral and bilateral upper limb training: The ULTRA-stroke program design. *BMC Neurology*, *9*, Article Number 57. DOI: [10.1186/1471-2377-9-57](https://doi.org/10.1186/1471-2377-9-57)
189. Stins, J.F., Ledebt, A., Emck, C., Van Dokkum, & **Beek, P. J.** (2009). Patterns of postural sway in high anxious children. *Behavioral and Brain Functions*, *5*, 42. DOI: [10.1186/1744-9081-5-42](https://doi.org/10.1186/1744-9081-5-42)
190. Houweling, S., Van Dijk, B. W., **Beek, P. J.**, & Daffertshofer, A. (2010). Cortico-spinal synchronization reflects changes in performance when learning a complex bimanual task. *NeuroImage*, *49*, 3269-3275. DOI: [10.1016/j.neuroimage.2009.11.422](https://doi.org/10.1016/j.neuroimage.2009.11.422)
191. Houweling, S., **Beek, P. J.**, & Daffertshofer, A. (2010). Spectral changes of interhemispheric cross-talk accompanying movement instabilities. *Cerebral Cortex*, *20*, 2605-2613. DOI: [10.1093/cercor/bhq008](https://doi.org/10.1093/cercor/bhq008)
192. Van Ulzen, N. R., Lamoth, C. J. C., Daffertshofer, A., Semin, G. R., & **Beek, P. J.** (2010). Stability and variability of

- acoustically specified coordination patterns while walking side-by-side on a treadmill: Does the seagull effect hold? *Neuroscience Letters*, 474, 79-83. DOI: [10.1016/j.neulet.2010.03.008](https://doi.org/10.1016/j.neulet.2010.03.008)
193. Bruijn, S. M., ten Kate, W. R. Th., Faber, G. S., Meijer, O. G., **Beek, P. J.**, & Van Dieën, J. H. (2010). Estimating dynamic gait stability using data from non-aligned inertial sensors. *Annals of Biomedical Engineering*, 38, 2588-2593. DOI: [10.1007/s10439-010-0018-2](https://doi.org/10.1007/s10439-010-0018-2)
  194. Koedijker, J. M., Oudejans, R. R. D., & **Beek, P. J.** (2010). Interference effects in learning similar sequences of discrete movements. *Journal of Motor Behavior*, 195, 209-222. DOI: [10.1080/00222895.2010.481694](https://doi.org/10.1080/00222895.2010.481694)
  195. Michaels, C., & **Beek, P.** (2010). The state of ecological psychology. *Ecological Psychology*, 7(4), 259-278. DOI: [10.1207/s15326969eco0704\\_2](https://doi.org/10.1207/s15326969eco0704_2)
  196. Van Soest, A. J., Casius, R., de Kok, W., Krijger, M., Meeder, M., & **Beek, P. J.** (2010). Are fast interceptive actions continuously guided by vision? Revisiting Bootsma and Van Wieringen (1990). *Journal of Experimental Psychology: Human Perception and Performance*, 36, 1040-1055. DOI: [10.1037/a0016890](https://doi.org/10.1037/a0016890)
  197. Van Soest, A. J., & **Beek, P. J.** (2010). Similar findings, different interpretations: A response to the commentary by Bootsma et al. (2010). *Journal of Experimental Psychology: Human Perception and Performance*, 36, 1064-1066. DOI: [10.1037/a0020059](https://doi.org/10.1037/a0020059)
  198. Feijen, L., Hodges, N. J., & **Beek, P. J.** (2010). Guiding a proprioceptive solution for acquiring a novel coordination skill: Experience of the correct motor commands is not needed for learning. *Journal of Motor Behavior*, 42, 295-306. DOI: [10.1080/00222895.2010.504760](https://doi.org/10.1080/00222895.2010.504760)
  199. Debats, N. B., Van de Langenberg, R., Kingma, I., Smeets, J. B. J., & **Beek, P. J.** (2010). Exploratory movements determine cue weighting in haptic length perception of handheld rods. *Journal of Neurophysiology*, 104, 2821-2830. DOI: [10.1152/jn.01029.2009](https://doi.org/10.1152/jn.01029.2009)
  200. Bruijn, S. M., Meijer, O. G., **Beek, P. J.**, & Van Dieën, J. H. (2010). The effects of arm swing on human gait stability. *Journal of Experimental Biology*, 213, 3945-3952. DOI: [10.1242/jeb.045112](https://doi.org/10.1242/jeb.045112)
  201. Emck, C., Bosscher, R. J., Van Wieringen, P. C. W., Doreleijers, Th., & **Beek, P. J.** (2011). Gross motor performance and physical fitness in children with psychiatric disorders. *Developmental Medicine and Child Neurology*, 53, 150-155. DOI: [10.1111/j.1469-8749.2010.03806.x](https://doi.org/10.1111/j.1469-8749.2010.03806.x)
  202. Roerdink, M., & **Beek, P. J.** (2011). Understanding inconsistent step-length asymmetries across hemiplegic stroke patients: Impairments and compensatory gait. *Neurorehabilitation and Neural Repair*, 25, 253-258. DOI: [10.1177/1545968310380687](https://doi.org/10.1177/1545968310380687)
  203. Koedijker, J. M., Poolton, J. M., Maxwell, J. P., Oudejans, R. D., **Beek, P. J.**, & Masters, R. S. W. (2011). Attention and time constraints in perceptual-motor learning and performance: Instruction, analogy, and skill level. *Consciousness and Cognition*, 20, 245-256. DOI: [10.1016/j.concog.2010.08.002](https://doi.org/10.1016/j.concog.2010.08.002)
  204. de Boer, B. J., Peper, C. E., & **Beek, P. J.** (2011). Frequency-induced changes in interlimb interactions: Increasing manifestations of closed-loop control. *Behavioural and Brain Research*, 16, 202-214. DOI: [10.1016/j.bbr.2011.01.057](https://doi.org/10.1016/j.bbr.2011.01.057)
  205. Vardy, A. N., Van Wegen, E. E., Kwakkel, G., Berendse, H. W., **Beek, P. J.**, & Daffertshofer, A. (2011). Slowing of M1 activity in Parkinson's disease during rest and movement – An EMG study. *Clinical Neurophysiology*, 122, 789-795. DOI: [10.1016/j.clinph.2010.10.034](https://doi.org/10.1016/j.clinph.2010.10.034)
  206. Roerdink, M., Bank, P. J. M., Peper, C. E., & **Beek, P. J.** (2011). Walking to the beat of different drums: Practical implications for the use of acoustic rhythms in gait rehabilitation. *Gait & Posture*, 33, 690-694. DOI: [10.1016/j.gaitpost.2011.03.001](https://doi.org/10.1016/j.gaitpost.2011.03.001)
  207. Stins, J. F., Roelofs, K., Villan, J., Kooijman, K., Hagenaaers, M. A., & **Beek, P. J.** (2011). Walk to me when I smile, step back when I'm angry: Emotional faces modulate whole-body approach-avoidance behaviors. *Experimental Brain Research*, 212, 603-611. DOI: [10.1007/s00221-011-2767-z](https://doi.org/10.1007/s00221-011-2767-z)
  208. Stins, J., Roerdink, M., & **Beek, P. J.** (2011). To freeze or not to freeze? Affective and cognitive perturbations have markedly different effects. *Human Movement Science*, 30, 190-202. DOI: [10.1016/j.humov.2010.05.013](https://doi.org/10.1016/j.humov.2010.05.013)
  209. Stins, J. F., & **Beek, P. J.** (2011). Organization of voluntary stepping in response to emotion-inducing pictures. *Gait & Posture*, 34, 164-168. DOI: [10.1016/j.gaitpost.2011.04.002](https://doi.org/10.1016/j.gaitpost.2011.04.002)
  210. Bruijn, S. M., Bregman, D. J. J., Meijer, O. G., **Beek, P. J.**, & Van Dieën, J. H. (2011). The validity of stability measures: A modelling approach. *Journal of Biomechanics*, 44, 2401-2408. DOI: [10.1016/j.jbiomech.2011.06.031](https://doi.org/10.1016/j.jbiomech.2011.06.031)
  211. Dessing, J. C., Rey, F. R., & **Beek, P. J.** (2012). Gaze fixation improves the stability of expert juggling. *Experimental Brain Research*, 216, 635-644. DOI: [10.1007/s00221-011-2967-6](https://doi.org/10.1007/s00221-011-2967-6)
  212. Stins, J. F., & **Beek, P. J.** (2012). A critical evaluation of the cognitive penetrability of posture. *Experimental Aging Research*, 38, 208-219. DOI: [10.1080/0361073X.2012.660053](https://doi.org/10.1080/0361073X.2012.660053)
  213. Roerdink, M., Roeles, S., Van der Pas, S., Bosboom, O., & **Beek, P. J.** (2012). Evaluating asymmetry in prosthetic gait with step-length asymmetry alone is flawed. *Gait & Posture*, 35, 446-451. DOI: [10.1016/j.gaitpost.2011.11.005](https://doi.org/10.1016/j.gaitpost.2011.11.005)
  214. Van Delden, L., Peper, L., **Beek, P. J.**, & Kwakkel, G. (2012). Unilateral versus bilateral upper limb exercise therapy after stroke: a systematic review. *Journal of Rehabilitation Medicine*, 44, 106-117. DOI: [10.2340/16501977-0928](https://doi.org/10.2340/16501977-0928)
  215. Emck, C., Bosscher, R. J., Van Wieringen, P. C. W., Doreleijers, Th., & **Beek, P. J.** (2012). Psychiatric symptoms in children with gross motor problems. *Adapted Physical Activity Quarterly*, 29, 161-178. DOI: [10.1123/apaq.29.2.161](https://doi.org/10.1123/apaq.29.2.161)
  216. Bruijn, S. M., Bregman, D. J. J., Meijer, O. G., **Beek, P. J.**, & Van Dieën, J. H. (2012). Maximum Lyapunov exponents as predictors of global gait stability: A modelling approach. *Medical Engineering & Physics*, 34, 428-436. DOI: [10.1016/j.medengphys.2011.11.005](https://doi.org/10.1016/j.medengphys.2011.11.005)

- [10.1016/j.medengphy.2011.07.024](https://doi.org/10.1016/j.medengphy.2011.07.024)
217. Hak, L., Houdijk, H., Steenbrink, F., Mert, A., Van der Wurff, P., **Beek, P. J.**, & Van Dieën, J. H. (2012). Speeding up or slowing down? Gait adaptations to preserve gait stability in response to balance perturbations. *Gait & Posture*, *36*, 260-264. DOI: [10.1016/j.gaitpost.2012.03.005](https://doi.org/10.1016/j.gaitpost.2012.03.005)
218. Van Wijk, B. C. M., **Beek, P. J.**, & Daffertshofer, A. (2012). Differential modulations of ipsilateral and contralateral beta (de)synchronization during unimanual force production. *European Journal of Neuroscience*, *36*, 2088-2097. DOI: [10.1111/j.1460-9568.2012.08122.x](https://doi.org/10.1111/j.1460-9568.2012.08122.x)
219. Van Wijk, B. C. M., **Beek, P. J.**, & Daffertshofer, A. (2012). Neural synchrony within the motor system: What have we learned so far? *Frontiers in Human Neuroscience*, *6*, 252. DOI: [10.3389/fnhum.2012.00252](https://doi.org/10.3389/fnhum.2012.00252)
220. Debats, N. B., Kingma, I., & **Beek, P. J.**, & Smeets, J. B. J. (2012). Moving the Weber fraction: The perceptual precision for moment of inertia increases with exploration. *PLOS One*, *7*(9): e42941. DOI: [10.1371/journal.pone.0042941](https://doi.org/10.1371/journal.pone.0042941)
221. Van Lummel, R. C., Ainsworth, E., Hausdorff, J. M., Lindemann, U., **Beek, P. J.**, & Van Dieën, J. H. (2012). Validation of seat-off and seat-on in repeated sit-to-stand movements using a single body fixed sensor. *Physiological Measurement*, *33*, 1855-1867. DOI: [10.1088/0967-3334/33/11/1855](https://doi.org/10.1088/0967-3334/33/11/1855)
222. De Boer, B. J., Peper, C. E., & **Beek, P. J.** (2012). Development of temporal and spatial bimanual coordination during childhood. *Motor Control*, *16*, 537-559. DOI: [10.1123/mcj.16.4.537](https://doi.org/10.1123/mcj.16.4.537)
223. Van Delden, L., Peper, L., Kwakkel, G., & **Beek, P. J.** (2012). A systematic review of bilateral upper limb training devices for poststroke rehabilitation. *Stroke Research and Treatment*, 2012:972069. DOI: [10.1155/2012/972069](https://doi.org/10.1155/2012/972069)
224. Bank, P. J. M., Peper, C. E., Marinus, J., **Beek, P. J.**, & Van Hilten, J. J. (2013). Motor consequences of experimentally induced pain: A systematic review. *European Journal of Pain*, *17*, 145-157. DOI: [10.1002/j.1532-2149.2012.00186.x](https://doi.org/10.1002/j.1532-2149.2012.00186.x)
225. De Boer, B. J., Peper, C. E., & **Beek, P. J.** (2013). Learning a new bimanual coordination pattern: Interlimb interactions, attentional focus, and transfer. *Journal of Motor Behavior*, *45*, 65-77. DOI: [10.1080/00222895.2012.744955](https://doi.org/10.1080/00222895.2012.744955)
226. Buijn, S. M., Meijer, O. G., **Beek, P. J.**, & Van Dieën, J. H. (2013). Assessing the stability of human locomotion: A review of current measures. *Journal of The Royal Society Interface*, *10*(83): 2120999. DOI: [10.1098/rsif.2012.0999](https://doi.org/10.1098/rsif.2012.0999)
227. Hak, L., Houdijk, H., Steenbrink, F., Mert, A., van der Wurff, P., **Beek, P. J.**, & van Dieën, J. H. (2013). Stepping strategies for regulating gait adaptability and stability. *Journal of Biomechanics*, *46*, 905-911. DOI: [10.1016/j.jbiomech.2012.12.017](https://doi.org/10.1016/j.jbiomech.2012.12.017)
228. Van Delden, L., Peper, L., **Beek, P. J.**, & Kwakkel, G. (2013). Match and mismatch between objective and subjective improvements in upper limb function after stroke. *Disability and Rehabilitation*, *35*, 1961-1967. DOI: [10.3109/09638288.2013.768303](https://doi.org/10.3109/09638288.2013.768303)
229. Roerdink, M., Bank, L., Peper, C. E., & **Beek, P. J.** (2013). Anchoring in rhythmic in-phase and antiphase visuomotor tracking. *Motor Control*, *17*, 176-189. DOI: [10.1123/mcj.17.2.176](https://doi.org/10.1123/mcj.17.2.176)
230. Roerdink, M., Ridderikhoff, A., Peper, C. E., & **Beek, P. J.** (2013). Informational and neuromuscular contributions to anchoring in rhythmic wrist cycling. *Annals of Biomedical Engineering*, *41*, 1726-1739. DOI: [10.1007/s10439-012-0680-7](https://doi.org/10.1007/s10439-012-0680-7)
231. Stins, J. F., & **Beek, P. J.** (2013). Effects of language processing on spontaneous muscle activity. *Journal of Neurolinguistics*, *26*, 363-369. DOI: [10.1016/j.jneuroling.2012.12.001](https://doi.org/10.1016/j.jneuroling.2012.12.001)
232. Van Ooijen, M. W., Roerdink, M., Trekop, M., Visschedijk, J., Janssen, T. W. J., & **Beek, P. J.** (2013). Functional gait rehabilitation in elderly people following a fall-related hip fracture using a treadmill with visual context: Desing of a randomized controlled trial. *BMC Geriatrics*, *13*(34). DOI: [10.1186/1471-2318-13-34](https://doi.org/10.1186/1471-2318-13-34)
233. Heeren, A., Van Ooijen, M., Geurts, A., Janssen, T. W. J., **Beek, P. J.**, Roerdink, M., Weerdesteyn, V. (2013). Step by step: a proof of concept study of C-mill gait adaptability training in the chronic phase after stroke. *Journal of Rehabilitation Medicine*, *45*, 616-622. DOI: [10.2340/16501977-1180](https://doi.org/10.2340/16501977-1180)
234. Bank, P. J. M., Peper, C. E., Marinus, J., **Beek, P. J.**, & Van Hilten, J. J. (2013). Deficient muscle activation in patients with Complex Regional Pain Syndrome and abnormal hand postures: An electromyographic evaluation. *Clinical Neurophysiology*, *124*, 2025-2035. DOI: [10.1016/j.clinph.2013.03.029](https://doi.org/10.1016/j.clinph.2013.03.029)
235. IJmker, T., Houdijk, H., Lamothe, C. J. C., Jarbandhan, A., Rijntjes, D., **Beek, P. J.**, & van der Woude, L. H. V. (2013). Effect of balance support on the energy cost of walking after stroke. *Archives of Physical Medicine and Rehabilitation*, *94*, 2255-2261. DOI: [10.1016/j.apmr.2013.04.022](https://doi.org/10.1016/j.apmr.2013.04.022)
236. Van Delden, A. E. Q., Peper, C. E., Nienhuys, K. N., Zijp, N. I., **Beek, P. J.**, & Kwakkel, G. (2013). Unilateral versus bilateral upper limb training after stroke: The ULTRA-Stroke randomized controlled clinical trial. *Stroke*, *44*, 2613-2616. DOI: [10.1161/STROKEAHA.113.001969](https://doi.org/10.1161/STROKEAHA.113.001969)
237. De Boer, B. J., Peper, C. E., A. Ridderikhoff, & **Beek, P. J.** (2013). Phase entrainment strength scales with movement amplitude disparity. *Motor Control*, *17*, 399-411. DOI: [10.1123/mcj.17.4.399](https://doi.org/10.1123/mcj.17.4.399)
238. Schreven, S., Toussaint, H. M., Smeets, J. B. J., & **Beek, P. J.** (2013). The effect of different inter-pad distances on the determination of active drag using the Measuring Active Drag System. *Journal of Biomechanics*, *46*, 1933-1937. DOI: [10.1016/j.jbiomech.2013.05.020](https://doi.org/10.1016/j.jbiomech.2013.05.020)
239. IJmker, T., Houdijk, H., Lamothe, C. J. C., **Beek, P. J.**, & van der Woude, L. H. V. (2013). Energy cost of balance control during walking decreases with external stabilizer stiffness independent of walking speed. *Journal of Biomechanics*, *46*, 2109-2114. DOI: [10.1016/j.jbiomech.2013.07.005](https://doi.org/10.1016/j.jbiomech.2013.07.005)

240. Bank, P. J. M., Peper, C. E., Marinus, J., **Beek, P. J.**, & Van Hilten, J. J. (2013). Motor dysfunction of Complex Regional Pain Syndrome is related to impaired central processing of proprioceptive information. *Journal of Pain*, *14*, 1460-1474. DOI: [10.1016/j.jpain.2013.07.009](https://doi.org/10.1016/j.jpain.2013.07.009)
241. Hak, L., Van Dieën, J. H., Wurff, P. V., Prins, M. R., Mert, A., **Beek, P. J.**, & Houdijk, H. (2013). Walking in an unstable environment: strategies used by transtibial amputees to prevent falling during gait. *Archives of Physical Medicine and Rehabilitation*, *94*, 2186-2193. DOI: [10.1016/j.apmr.2013.07.020](https://doi.org/10.1016/j.apmr.2013.07.020)
242. Van den Heuvel, M. R. C., Van Wegen, E. E. H., De Goede, C. J. T., Burgers-Pots, I. A. L., **Beek, P. J.**, Daffertshofer, A., Kwakkel, G. (2013). The effects of augmented visual feedback during balance training in Parkinson's disease: study design of a randomized clinical trial. *BMC Neurology*, *13*(137). DOI: [10.1186/1471-2377-13-137](https://doi.org/10.1186/1471-2377-13-137)
243. Hak, L., Houdijk, H., van der Wurff, P., Prins, M. R., Mert, A., **Beek, P. J.**, & van Dieën, J. H. (2013). Stepping strategies used by post-stroke individuals to maintain margins of stability during walking. *Clinical Biomechanics*, *28*, 1041-1048. DOI: [10.1016/j.clinbiomech.2013.10.010](https://doi.org/10.1016/j.clinbiomech.2013.10.010)
244. Hak, L., Houdijk, H., **Beek, P. J.**, & van Dieën, J. H. (2013). Steps to take to enhance gait stability: the effect of stride frequency, stride length, and walking speed on local dynamic stability and margins of stability. *PLOS One*, *8*(12): e82842. DOI: [10.1371/journal.pone.0082842](https://doi.org/10.1371/journal.pone.0082842)
245. Rispens, S. M., Pijnappels, M., van Dieën, J. H., van Schooten, K. S., **Beek, P. J.**, & Daffertshofer, A. (2014). A benchmark test of accuracy and precision in estimating dynamical systems characteristics from a time series. *Journal of Biomechanics*, *47*, 470-475. DOI: [10.1016/j.jbiomech.2013.10.037](https://doi.org/10.1016/j.jbiomech.2013.10.037)
246. Stevens, T. G. A., de Ruyter, C. J., van Niel, C., van de Rhee, R., **Beek, P. J.**, & Savelsbergh, G. J. P. (2014). Measuring acceleration and deceleration in soccer-specific movements using a Local Position Measurement (LPM) system. *International Journal of Sports Physiology and Performance*, *9*, 446-456. DOI: [10.1123/IJSP.2013-0340](https://doi.org/10.1123/IJSP.2013-0340)
247. Marmelat, V., Delignières, D., Torre, K., **Beek, P. J.**, & Daffertshofer, A. (2014). 'Human paced' walking: followers adopt stride time dynamics of leaders. *Neuroscience Letters*, *564*, 67-71. DOI: [10.1016/j.neulet.2014.02.010](https://doi.org/10.1016/j.neulet.2014.02.010)
248. Marmelat, V., Torre, K., **Beek, P. J.**, & Daffertshofer, A. (2014). Persistent fluctuations in stride intervals under fractal auditory stimulation. *PLOS One*, *9*(3): e91949. DOI: [10.1371/journal.pone.0091949](https://doi.org/10.1371/journal.pone.0091949)
249. Bank, P. J. M., Peper, C. E., Marinus, J., **Beek, P. J.**, & Van Hilten, J. J. (2014). Evaluation of mirrored muscle activity in patients with Complex Regional Pain Syndrome. *Clinical Neurophysiology*, *125*, 2100-2108. DOI: [10.1016/j.clinph.2014.02.019](https://doi.org/10.1016/j.clinph.2014.02.019)
250. Mazaheri, M., Roerdink, M., Bood, R. J., Duysens, J., **Beek, P. J.**, & Peper, C. E. (2014). Attentional costs of visually guided walking: Effects of age, executive function and stepping-task demands. *Gait & Posture*, *40*, 182-186. DOI: [10.1016/j.gaitpost.2014.03.183](https://doi.org/10.1016/j.gaitpost.2014.03.183)
251. Rispens, S. M., van Schooten, K. S., Pijnappels, M., Daffertshofer, A., **Beek, P. J.**, & van Dieën, J. H. (2014). Consistency of gait characteristics as determined from acceleration data collected at different trunk locations. *Gait & Posture*, *40*, 187-192. DOI: [10.1016/j.gaitpost.2014.03.182](https://doi.org/10.1016/j.gaitpost.2014.03.182)
252. Stins, J. F., Lobel, A., Roelofs, K., & **Beek, P. J.** (2014). Social embodiment in directional stepping behavior. *Cognitive Processing*, *15*, 245-252. DOI: [10.1007/s10339-013-0593-x](https://doi.org/10.1007/s10339-013-0593-x)
253. Ijmker, T., Lamoth, C. J. C., Houdijk, H., van der Woude, L. H. V., & **Beek, P. J.** (2014). Postural threat during walking: effects on energy cost and accompanying gait changes. *Journal of Neuroengineering and Rehabilitation*, *11*:71. DOI: [10.1186/1743-0003-11-71](https://doi.org/10.1186/1743-0003-11-71)
254. Kaptein, R. G., Wezenberg, D., Ijmker, T., Houdijk, H., Lamoth, C. J. C., **Beek, P. J.**, & Daffertshofer, A. (2014). Shotgun approaches to gait analysis: insights and limitations. *Journal of Neuroengineering and Rehabilitation*, *11*: 120. DOI: [10.1186/1743-0003-11-120](https://doi.org/10.1186/1743-0003-11-120)
255. Ijmker, T., Noten, S., Lamoth, C. J. C., **Beek, P. J.**, van der Woude, L. H. V., & Houdijk, H. (2014). Can external lateral stabilization reduce the energy cost of walking in persons with a lower limb amputation? *Gait & Posture*, *40*, 187-192. DOI: [10.1016/j.gaitpost.2014.07.013](https://doi.org/10.1016/j.gaitpost.2014.07.013)
256. Roerdink, M., Cutti, A. G., Summa, A., Monari, D., Veronesi, D., van Ooijen, M. W., & **Beek, P. J.** (2014). Gaitography applied to prosthetic walking. *Medical & Biological Engineering & Computing*, *52*, 963-969. DOI: [10.1007/s11517-014-1195-1](https://doi.org/10.1007/s11517-014-1195-1)
257. van den Heuvel, M. R., Kwakkel, G., **Beek, P. J.**, Berendse, H. W., Daffertshofer, A., & van Wegen, E. E. (2014). Effects of augmented visual feedback during balance training in Parkinson's disease: A pilot randomized clinical trial. *Parkinsonism and Related Disorders*, *20*, 1352-1358. DOI: [10.1016/j.parkreldis.2014.09.022](https://doi.org/10.1016/j.parkreldis.2014.09.022)
258. Rispens, S. M., van Schooten, K. S., Pijnappels, M., Daffertshofer, A., **Beek, P. J.**, & van Dieën, J. H. (2015). Identification of fall risk predictors in daily life measurements: gait characteristics' reliability and association with self-reported fall history. *Neurorehabilitation and Neural Repair*, *29*, 54-61. DOI: [10.1177/1545968314532031](https://doi.org/10.1177/1545968314532031)
259. Hak, L., Houdijk, H., Van der Wurff, P., Prins, M. R., **Beek, P. J.**, & Van Dieën, J. H. (2015). Stride frequency and length adjustment in post-stroke individuals: Influence on the margins of stability. *Journal of Rehabilitation Medicine*, *47*, 126-132. DOI: [10.2340/16501977-1903](https://doi.org/10.2340/16501977-1903)
260. Stins, J. F., van Gelder, M. A., Oudenhoven, L. M., & **Beek, P. J.** (2015). Biomechanical organization of gait initiation depends on the timing of affective processing. *Gait & Posture*, *41*, 159-163. DOI: [10.1016/j.gaitpost.2014.09.020](https://doi.org/10.1016/j.gaitpost.2014.09.020)
261. Van Delden, A. E. Q., **Beek, P. J.**, Roerdink, M., Kwakkel, G., & Peper, C. E. (2015). Unilateral and bilateral upper-limb training interventions after stroke have similar effects on bimanual coupling strength. *Neurorehabilitation and Neural Repair*, *29*, 255-267. DOI: [10.1177/1545968314543498](https://doi.org/10.1177/1545968314543498)
262. Stins, J. F., Kempe, C. A., Hagenars, M. A., **Beek, P. J.**, & Roelofs, K. (2015). Attention and postural control in

- patients with conversion paresis. *Journal of Psychometric Research*, 78, 249-254. DOI: [10.1016/j.jpsychores.2014.11.009](https://doi.org/10.1016/j.jpsychores.2014.11.009)
263. Rispens, S., van Schooten, K. S., Pijnappels, M., Daffertshofer, A., **Beek, P. J.**, & van Dieën, J. H. (2015). Do extreme values of daily-life gait characteristics provide more information about fall risk than median values? *Journal of Medical Internet Research*, 4: 1. DOI: [10.2196/resprot.3931](https://doi.org/10.2196/resprot.3931)
264. Van Ooijen, M. W., Heeren, J. H. M., Smulders, K., Geurts, A. C. H., Janssen, T. W. J., **Beek, P. J.**, Weerdesteyn, V., & Roerdink, M. (2015). Improved gait adjustments after gait adaptability training are associated with reduced attentional demands in persons with stroke. *Experimental Brain Research*, 233, 1007-1018. DOI: [10.1007/s00221-014-4175-7](https://doi.org/10.1007/s00221-014-4175-7)
265. Bank, P. J. M., Peper, C. E., Marinus, J., Van Hilten, J. J., & **Beek, P. J.** (2015). Intended and unintended (sensory-)motor coupling between the affected and unaffected upper limb in Complex Regional Pain Syndrome. *European Journal of Pain*, 19, 1021-1034. DOI: [10.1002/ejp.668](https://doi.org/10.1002/ejp.668)
266. Stevens, T. G. A., de Ruiter, C. J., van Maurik, D., van Lierop, C. J. W., Savelsbergh, G. J. P., & **Beek, P. J.** (2015). Measured and estimated energy cost of constant and shuttle running in soccer players. *Medicine and Science in Sports and Exercise*, 47(6), 1219-1224. DOI: [10.1249/MSS.0000000000000515](https://doi.org/10.1249/MSS.0000000000000515)
267. Stins, J. F., Emck, C., de Vries, E. M., Doop, S., & **Beek, P. J.** (2015). Attentional and sensory contributions to postural sway in children with autism spectrum disorder. *Gait & Posture*, 42, 199-203. DOI: [10.1016/j.gaitpost.2015.05.010](https://doi.org/10.1016/j.gaitpost.2015.05.010)
268. Stins, J. F., Schneider, I. K., Koole, S. L., & **Beek, P. J.** (2015). The influence of mental imagery on postural sway: Differential effects of type of body movement and person perspective. *Advances in Cognitive Psychology*, 11, 77-83. DOI: [10.5709/acp-0173-x](https://doi.org/10.5709/acp-0173-x)
269. Schreven, S., Smeets, J. B. J., & **Beek, P. J.** (2015) Optimising filtering parameters for a 3D motion analysis system. *Journal of Electromyography and Kinesiology*, 25, 808-814. DOI: [10.1016/j.jelekin.2015.06.004](https://doi.org/10.1016/j.jelekin.2015.06.004)
270. IJmker, T., Lamoth, C. J. C., Houdijk, J. H. P., Tolsma, M., van der Woude, L. H. V., Daffertshofer, A., & **Beek, P. J.** (2015). Effects of handrail hold and light touch on energetics, step parameters, and neuromuscular activity during walking after stroke. *Journal of Neuroengineering and Rehabilitation*, 12:70. DOI [10.1186/s12984-015-0051-3](https://doi.org/10.1186/s12984-015-0051-3)
271. Roerdink, M., Daffertshofer, A., Marmelat, V., & **Beek, P. J.** (2015). How to sync to the beat of a persistent fractal metronome without falling off the treadmill? *PLOS One*, 10(7):e0134148. DOI: [10.1371/journal.pone.0134148](https://doi.org/10.1371/journal.pone.0134148)
272. Mazaheri, M., Hoogkamer, W., Potocanac, Z., Verschueren, S., Roerdink, M., **Beek, P. J.**, Peper, C. E., & Duysens, J. (2015). Effects of aging and dual tasking on step adjustments to perturbations in visually cued walking. *Experimental Brain Research*, 223, 3467-3474. DOI: [10.1007/s00221-015-4407-5](https://doi.org/10.1007/s00221-015-4407-5)
273. Bouman, D., Stins, J. F., & **Beek, P. J.** (2015). Arousal and exposure duration affect forward step initiation. *Frontiers in Psychology*, 6:1167. DOI: [10.3389/fpsyg.2015.01667](https://doi.org/10.3389/fpsyg.2015.01667)
274. van Lummel, R. C., Walgaard, S., Pijnappels, M., Elders, P. J. M., Garcia-Aymerich, J., van Dieën, J. H., & **Beek, P. J.** (2015). Physical performance and physical activity in older adults: associated but separate domains of physical function in old age. *PLOS One*, 10:e0144048. DOI: [10.1371/journal.pone.0144048](https://doi.org/10.1371/journal.pone.0144048)
275. Dessing, J. C., & **Beek, P. J.** (2015). Human Movement Science adopts Registered Reports for hypothesis-driven research. *Human Movement Science*, 44, A1-A2. DOI: [10.1016/j.humov.2015.09.011](https://doi.org/10.1016/j.humov.2015.09.011)
276. Stevens, T. G. A., de Ruiter, C. J., Savelsbergh, G. J. P., & **Beek, P. J.** (2016). Validity and reliability of six-a-side small-sided game locomotor performance in assessing physical fitness in football players. *Journal of Sports Sciences*, 34, 527-534. DOI: [10.1080/02640414.2015.1116709](https://doi.org/10.1080/02640414.2015.1116709)
277. Rispens, S., van Dieën, J. H., van Schooten, K. S., Cofre Lizama, L. E., Daffertshofer, A., **Beek, P. J.**, & Pijnappels, M. (2016). Fall-related gait characteristics on the treadmill and in daily life. *Journal of NeuroEngineering and Rehabilitation*, 13:12. DOI: [10.1186/s12984-016-0118-9](https://doi.org/10.1186/s12984-016-0118-9)
278. Bouman, D., Stins, J. F., & **Beek, P. J.** (2016). Corrigendum: Arousal and exposure affect forward and step initiation (vol. 6, p. 1667, 2015). *Frontiers in Psychology*, 7:164.
279. Mazaheri, M., Roerdink, M., Duysens, J., **Beek, P. J.**, & Peper, C. E. (2016). Attentional costs of walking are not affected by variations in lateral balance demands in young and older adults. *Gait & Posture*, 46, 126-131. DOI: [10.1016/j.gaitpost.2016.03.004](https://doi.org/10.1016/j.gaitpost.2016.03.004)
280. Van den Heuvel, M. R., Daffertshofer, A., **Beek, P. J.**, Kwakkel, G., & van Wegen, E. E. (2016). The effects of visual feedback during a rhythmic weight-shifting task in patients with Parkinson's disease. *Gait & Posture*, 48, 140-145. DOI: [10.1016/j.gaitpost.2016.03.020](https://doi.org/10.1016/j.gaitpost.2016.03.020)
281. Van Lummel, R. C., Walgaard, S., Maier, A. B., Ainsworth, E., **Beek, P. J.**, & van Dieën, J. H. (2016). The instrumented Sit-to-Stand Test (iSTS) has greater clinical relevance than the manually recorded Sit-to-Stand Test in older adults. *PLOS One*, 11(7):e0157968. DOI: [10.1371/journal.pone.0157968](https://doi.org/10.1371/journal.pone.0157968)
282. Timmermans, C., Roerdink, M., Van Ooijen, M. W., Meskers, C., Janssen, T. W. J., & **Beek, P. J.** (2016). Walking adaptability therapy after stroke: study protocol for a randomized controlled trial. *Trials*, 17(1):425. DOI: [10.1186/s13063-016-1527-6](https://doi.org/10.1186/s13063-016-1527-6)
283. van Schooten, K. S., Pijnappels, M., Rispens, S. M., Elders, P. J. M., Lips, P., Daffertshofer, A., **Beek, P. J.**, & van Dieën, J. (2016). Daily-life gait quality as predictor of falls in older people: a 1-year prospective cohort study. *PLOS One*, 11(7):e0158623. DOI: [10.1371/journal.pone.0158623](https://doi.org/10.1371/journal.pone.0158623)
284. Van Ooijen, M. W., Roerdink, M., Trekop, M., Janssen, T. W. J., & **Beek, P. J.** (2016). The efficacy of treadmill training with and without projected visual context for improving walking ability and reducing fall incidence and fear of

- falling in older adults with fall-related hip fracture. A randomized controlled trial. *BMC Geriatrics*, 16:215. DOI: [10.1186/s12877-016-0388-x](https://doi.org/10.1186/s12877-016-0388-x)
285. De Melker Worms, J., Stins, J. F., van Wegen, E. E. H., Verschueren, S. M. P., Loram, I., & **Beek, P. J.** (2017). Influence of focus of attention, reinvestment and fall history on elderly gait stability. *Physiological Reports*, 5(1):e13061. DOI: [10.14814/phy2.13061](https://doi.org/10.14814/phy2.13061)
286. Van Houwelingen, J., Schreven, S., Smeets, J. B. J., Clercx, H. J. H., & **Beek, P. J.** (2017). Effective propulsion in swimming: Grasping the hydrodynamics of hand movements. *Journal of Applied Biomechanics*, 33, 87-100. DOI: [10.1123/jab.2016-0064](https://doi.org/10.1123/jab.2016-0064)
287. Stevens, T. G. A., de Ruiter, C. J., Savelsbergh, G. J. P., & **Beek, P. J.** (2017). Quantification of in-season training load relative to match load in professional Dutch Eredivisie football players. *Journal of Sports Sciences: Science and Medicine in Football*, 1(2). DOI: [10.1080/24733938.2017.1282163](https://doi.org/10.1080/24733938.2017.1282163)
288. De Melker Worms, J., Stins, J. F., van Wegen, E. E. H., Verschueren, S. M. P., **Beek, P. J.**, & Loram, I. (2017). Effects of attentional focus on walking stability in elderly. *Gait & Posture*, 55, 94-99. DOI: [10.1016/j.gaitpost.2017.03.031](https://doi.org/10.1016/j.gaitpost.2017.03.031)
289. Ganzevles, S. P. M., Vullings, R., **Beek, P. J.**, Daanen, H. A. M., & Truijens, M. J. (2017). Using tri-axial accelerometry in daily elite swim training practice. *Sensors*, 17(5), 990. DOI: [10.3390/s17050990](https://doi.org/10.3390/s17050990)
290. Ganzevles, S. P. M., de Haan, A., **Beek, P. J.**, Daanen, H. A. M., & Truijens, M. J. (2017). Heart rate recovery after warm-up in swimming: a useful measure for predicting training heart rate response? *International Journal of Sports Physiology and Performance*, 12(6), 742-748. DOI: [10.1123/ijsp.2016-0144](https://doi.org/10.1123/ijsp.2016-0144)
291. **Beek, P. J.**, Hutter, V. I., & Oudejans, R. R. D. (2017). Editorial overview: Trending topics in sport psychology. *Current Opinion in Psychology*, 16, iv-vii. DOI: [10.1016/j.copsyc.2017.06.002](https://doi.org/10.1016/j.copsyc.2017.06.002)
292. De Melker Worms, J., Stins, J. F., **Beek, P. J.**, & Loram, I. (2017). The effect of fear of falling on vestibular feedback control of balance. *Physiological Reports*, 5(18):e13391. DOI: [10.14814/phy2.13391](https://doi.org/10.14814/phy2.13391)
293. Van Oeveren, B. T., de Ruiter, **Beek, P. J.**, & van Dieën, J. (2017). Optimal stride frequencies in running at different speeds. *PLOS One*, 12(10):e0184273. DOI: [10.1371/journal.pone.0184273](https://doi.org/10.1371/journal.pone.0184273)
294. Van Houwelingen, J., Roerdink, M., Huibers, A. V., Evers, L. L. W., & **Beek, P. J.** (2017). Pacing the phasing of leg-arm coordination in breaststroke swimming to minimize intra-cyclic velocity fluctuations. *PLOS One*, 12(10):e0186160. DOI: [10.1371/journal.pone.0186160](https://doi.org/10.1371/journal.pone.0186160)
295. Van de Kamp, M. M., Emck, C., Cuijpers, P., & **Beek, P. J.** (2018). A psychomotor diagnostic instrument for patients with post- traumatic stress disorder. *Body, Movement and Dance in Psychotherapy*, 13(1), 33-49. DOI: [10.1080/17432979.2017.1420692](https://doi.org/10.1080/17432979.2017.1420692)
296. Van Oeveren, B. T., de Ruiter, **Beek, P. J.**, Rispens, S. M., & van Dieën, J. H. (2018). An adaptive, real-time stride detection algorithm for unconstrained sensor placement. *Medical Engineering and Physics*, 52, 49-58. DOI: [10.1016/j.medengphy.2017.12.007](https://doi.org/10.1016/j.medengphy.2017.12.007)
297. Van Lummel, R. C., Evers, J., Niessen, M., **Beek, P. J.**, & van Dieën, J. H. (2018). Older adults with weaker muscle strength stand up from a sitting position with more dynamic trunk use. *Sensors. Special Issue on Sensors for Gait, Posture, and Health Monitoring*. *Sensors*, 18(4), 1235. DOI: [10.3390/s18041235](https://doi.org/10.3390/s18041235)
298. Stins, J. F., Yaari, G., Wijmer, K., Burger, J. F., & **Beek, P. J.** (2018). Evidence for sequential performance effects in professional darts. *Frontiers in Psychology, section Movement Science and Sport Psychology*, 9:591. DOI: [10.3389/fpsyg.2018.00591](https://doi.org/10.3389/fpsyg.2018.00591)
299. Van den Heuvel, M. R., van Wegen, E. E., **Beek, P. J.**, Kwakkel, G., & Daffertshofer, A. (2018). Incongruent visual feedback during a postural task enhances cortical alpha and beta modulation in patients with Parkinson's disease. *Clinical Neurophysiology*, 129, 1357-1365. DOI: [10.1016/j.clinph.2018.04.602](https://doi.org/10.1016/j.clinph.2018.04.602)
300. Timmermans, C., Roerdink, M., Janssen, T. W. J., Meskers, G. M., & **Beek, P. J.** (2018). Dual-task walking in challenging environments in people with stroke: cognitive-motor interference and task-prioritization. *Stroke Research and Treatment*, 2018:7928597. DOI: [10.1155/2018/7928597](https://doi.org/10.1155/2018/7928597)
301. Van der Graaff, E., Hoozemans, M., Pasteuning, M., Veeger, H.E., & **Beek, P. J.** (2018). Focus of attention instructions during baseball pitching. *International Journal of Sports Science and Coaching*, 13, 391-397. DOI: [10.1177/1747954117711095](https://doi.org/10.1177/1747954117711095)
302. Hofmijster, M. J., Lintmeijer, L. L., **Beek, P. J.**, & van Soest, A. J. (2018). Mechanical power output in rowing should not be determined from oar forces and oar motion alone. *Journal of Sport Sciences*, 36, 2147-2153. DOI: [10.1080/02640414.2018.1439346](https://doi.org/10.1080/02640414.2018.1439346)
303. Lintmeijer, L. L., van Soest, A. J., Robbers, F., Hofmijster, M. J., & **Beek, P. J.** (2019). Real-time feedback on mechanical power output: facilitating rowers' with prescribed training intensity. *International Journal of Sport Physiology and Performance*, 14(3), 303-309. DOI: [10.1123/ijsp.2018-0128](https://doi.org/10.1123/ijsp.2018-0128)
304. Van Oeveren, B. T., de Ruiter, **Beek, P. J.**, Rispens, S. M., & **van Dieën, J.** (2019). Inter-individual differences in stride frequencies during running from wearable data. *Journal of Sports Sciences*, 37, 1996-2006. DOI: [10.1080/02640414.2019.1614137](https://doi.org/10.1080/02640414.2019.1614137)
305. Timmermans, C., Roerdink, M., Janssen, T. W. J., **Beek, P. J.**, & Meskers, C. (2019). Automated, standardized and patient-tailored progressive walking-adaptability training: A proof-of-concept study. *Physical Therapy*, 99, 882-892. DOI: [10.1186/s13063-021-05742-3](https://doi.org/10.1186/s13063-021-05742-3)
306. Smit, M. J., Scheffers, M., Emck, C. van Busschbach, J. T., & **Beek, P. J.** (2019). Clinical characteristics of individuals with intellectual disability who have experienced sexual abuse. An overview of the literature. *Research in Developmental Disabilities*, 95, 103513. DOI: [10.1016/j.ridd.2019.103513](https://doi.org/10.1016/j.ridd.2019.103513)
307. Van de Kamp, M. M., Scheffers, M., Hatzmann, J., Emck, C., Cuijpers, P., & **Beek, P. J.** (2019). Body- and

- movement-oriented interventions for posttraumatic stress disorder: A systematic review and meta-analysis. *Journal of Traumatic Stress*, 32(6), 967-976. DOI: [10.1002/jts.22465](https://doi.org/10.1002/jts.22465)
308. Ganzevles, S. P. M., **Beek, P. J.**, Daanen, H. A. M., Coolen, B. M. A., & Truijens, M. J. (2019). Differences in swimming smoothness between elite and non-elite swimmers. *Sports Biomechanics*. DOI: [10.1080/14763141.2019.1650102](https://doi.org/10.1080/14763141.2019.1650102)
309. Coolen, B., **Beek, P. J.**, Geerse, D. J., & Roerdink, M. (2020). Avoiding 3D obstacles in mixed reality: Does it differ from negotiating real obstacles? *Sensors*, 20, 1095. DOI: [10.3390/s20041095](https://doi.org/10.3390/s20041095)
310. Nijs, A., Roerdink, M., & **Beek, P. J.** (2020). Cadence modulation in experienced runners via step-based versus stride-based timing. *Brain Sciences*, 10, 273. DOI: [10.3390/brainsci10050273](https://doi.org/10.3390/brainsci10050273)
311. Dukalski, R., Lukosch, S., Schwab, A., **Beek, P. J.**, & Brazier, F. M. (2020). Exploring the effect of pacing plan feedback for professional road cycling. *Proceedings*, 49, 58. DOI: [10.3390/proceedings2020049058](https://doi.org/10.3390/proceedings2020049058)
312. De Poel, H., Roerdink, M., Peper, C. E., & **Beek, P. J.** (2020). A re-appraisal of the effect of amplitude on the stability of interlimb coordination based on tightened normalization procedures. *Brain Sciences*, 10, 274. DOI: [10.3390/brainsci10100724](https://doi.org/10.3390/brainsci10100724)
313. Van Dijk, M. P., **Beek, P. J.**, Van Soest, A. J. (2020). Predicting dive start performance from kinematic variables at water entry in (sub-)elite swimmers. *PLOS One*, 15(10):e0241345. DOI: [10.1371/journal.pone.0241345](https://doi.org/10.1371/journal.pone.0241345)
314. Bouman, D., Stins, J. F., & **Beek, P. J.** (2021). The effect of distance change and response label on whole-body approach-avoidance behaviour. *Psychology and Neuroscience*, 14, 156-172. DOI: [10.1037/pne000025](https://doi.org/10.1037/pne000025)
315. Nijs, A., Roerdink, M., & **Beek, P. J.** (2021). Effects of acoustically paced cadence modulation on impact forces in running. *Gait & Posture*, 90, 234-238. DOI: [10.1016/j.gaitpost.2021.09.168](https://doi.org/10.1016/j.gaitpost.2021.09.168)
316. Nijs, A., **Beek, P. J.**, & Roerdink, M. (2021). Reliability and validity of running cadence and stance time derived from instrumented wireless earbuds. *Sensors*, 21, 7995. DOI: [10.3390/s21237995](https://doi.org/10.3390/s21237995)
317. Timmermans, C., Roerdink, M., Meskers, C. G. M., **Beek, P. J.**, & Janssen, T. W. J. (2021). Walking-adaptability therapy after stroke: results of a randomized controlled trial. *Trials*, 22: 923 (2021). DOI: [10.1186/s13063-021-05742-3](https://doi.org/10.1186/s13063-021-05742-3)
318. Van Oeveren, B., de Ruiter, C. J., **Beek, P. J.**, & Van Dieën, J. H. (2021). The biomechanics of running and running styles: a synthesis. *Sports Biomechanics*. DOI: [10.1080/14763141.2021.1873411](https://doi.org/10.1080/14763141.2021.1873411)
319. Smit, M. J., Scheffers, M., Emck, C., van Busschbach, J. T., & **Beek, P. J.** (2021). The Body Experience Questionnaire for adults with mild intellectual disability or borderline intellectual functioning (BEQ-mb): development and initial evaluation. *Journal of Intellectual and Developmental Disability*, 47, 141-115. DOI: [10.3109/13668250.2021.1929879](https://doi.org/10.3109/13668250.2021.1929879)
320. Lidstone, S. C., Costa-Parke, M., Robinson, E. J., Ercoli, T., Stone, J.; FMD GAP Study Group (among which **Beek, P. J.**) (2022). Functional movement disorder gender, age and phenotype study: a systematic review and individual patient meta-analysis of 4905 cases. *Journal of Neurology, Neurosurgery and Psychiatry*, 93, 609-616. DOI: [10.1136/jnnp-2021-328462](https://doi.org/10.1136/jnnp-2021-328462)
321. Schreven, S., Smeets, J. B. J., & **Beek, P. J.** (2022). Sprint performance in arms-only front crawl swimming strongly depends on the power to drag ratio. *Frontiers in Sports and Active Living*, 4:758095. DOI: [10.3389/fspor.2022.758095](https://doi.org/10.3389/fspor.2022.758095)
322. David, S., van Duijven, M., Grove, T., Koster, P., & **Beek, P. J.** (2022). Improving tumble turn performance in swimming – the impact of wall contact time and tuck index. *Frontiers in Sports and Active Living*, 4:936695. DOI: [10.3389/fspor.2022.936695](https://doi.org/10.3389/fspor.2022.936695)
323. Koster, P., Arnoldus, W., David, S., Koster, P., Schreven, S., & **Beek, P. J.** (2022). How critical is the choice of distance based-measures in studying tumble turn performance? *Frontiers in Sports and Active Living*, 4:958548. DOI: [10.3389/fspor.2022.958548](https://doi.org/10.3389/fspor.2022.958548)
324. Nijs, A., Roerdink, M., & **Beek, P. J.** (2022). Running-style modulation: Effects of stance-time and flight-time instructions on duty factor and cadence. *Gait & Posture*, 98, 283-288. DOI: [10.1016/j.gaitpost.2022.10.002](https://doi.org/10.1016/j.gaitpost.2022.10.002)
325. Smit, M. J., Emck, C., Scheffers, M., van Busschbach, J. T., & **Beek, P. J.** (2023). The impact of sexual abuse on body experience in adults with mild intellectual disability and borderline intellectual functioning. *Journal of Intellectual and Developmental Disability*. DOI: [10.3109/13668250.2022.2158725](https://doi.org/10.3109/13668250.2022.2158725)
326. Smit, M. J., Scheffers, M., Emck, C., van Busschbach, J. T., & Engelsman, L., & **Beek, P. J.** (2023). Policy on sexual abuse: a survey study amongst managers of care facilities for individuals with intellectual disability in the Netherlands. *Journal of Policy and Practice in Intellectual Disabilities*. DOI: [10.1111/jppi.12462](https://doi.org/10.1111/jppi.12462)
327. Minkels, C., van der Kamp, J., & **Beek, P. J.** (2023). How intrinsically motivating are swimming instructors / lessons in the Netherlands? An observational study through the lens of the self-determination theory. *Frontiers in Sports and Active Living*, 5:1236256. DOI: [10.3389/fspor.2023.1236256](https://doi.org/10.3389/fspor.2023.1236256)
328. Noteboom, L., Nijs, A., **Beek, P. J.**, van der Helm, F. C. T., & Hoozemans, M. J. M. (2023). A muscle load feedback application for strength training: a proof-of-concept study. *Sports*, 11.
329. Van de Kamp, M. M., Scheffers, M., Emck, C., Fokker, T. J., Hatzmann, J., Cuijpers, P., & **Beek, P. J.** Body- and movement-oriented interventions for posttraumatic stress disorder: an update systematic review and meta-analysis. *Journal of Traumatic Stress*.

#### Articles in preparation, under review or in revision (7)

- Van der Graaff, E., Hoozemans, M., Veeger, H.E., & **Beek, P. J.** External versus internal focus of attention in day-to-day baseball pitching training – a multicenter, randomized controlled cross-over intervention involving four national youth teams.
- Van Oeveren, B., de Ruiter, C. J., **Beek, P. J.**, & Van Dieën, J. H. Training behaviour, motivation and injury incidence in recreational runners of different performance levels.
- Wolffgram, J., van der Kamp, J., Berger, M., & **Beek, P. J.** Providing physical education to children with developmental

- coordination disorder: what do Dutch teachers know, do, belief and experience?
- Weissinger, K., Bach, M. M., Brachmann, Stins, J. F., & **Beek, P. J.** Marginal evidence for an effect of experimentally induced mental fatigue on static balance control in healthy young adults.
- Nijs, A., Roerdink, M., & **Beek, P. J.** (2023). Exploring running styles in the field through cadence and duty factor modulation.
- Ganzevles, S. P. M., Beek, P. J., Daanen, H. A. M., Truijens, M. Practical application of a heuristic model for swim coaches.
- de Haan, M., van der Zwaard, S., **Beek, P. J.**, & Jaspers, R. T. Physiological match performance in soccer should not be understood from playing position but in terms of player-specific profiles.

### Publications in Dutch (61)

- Beek, P. J.** (1984). Lichaamsbeelden en expressieconcepten in de sociale psychologie [Images of the human body and concepts of expression in social psychology]. *Bewegen en Hulpverlening*, 1, 228-236.
- Beek, P. J.**, & Bootsma, R. J. (1986). Theoretische problemen ten aanzien van leren via imitatie [Theoretical problems regarding learning through imitation]. *Bewegen en Hulpverlening*, 3, 308-315.
- Bootsma, R. J., & **Beek, P. J.** (1986). Bewegingstherapie in ecologisch perspectief [An ecological perspective on movement therapy]. *Bewegen en Hulpverlening*, 3, 316-323.
- Beek, P. J.**, & Bootsma, R. J. (1987). Psychologische leertheorieën en hun relevantie voor de sportpraktijk [Psychological learning theories and their practical relevance in sports]. In L. Clijsen & B. Crum (Eds.), *Coachen, aspecten van leidinggeven in de sport* (pp. 3200/1-3200/44). Alphen aan de Rijn: Samson.
- Bootsma, R. J., & **Beek, P. J.** (1988). Coördinatie en controle van groot-motorische vaardigheden [Coordination and control of gross motor skills]. In P. J. G. Keuss, G. ten Hoopen, & A. A. J. Mannaerts (Eds.), *Menselijke motoriek* (pp. 29-42). Lisse: Swets & Zeitlinger.
- Beek, P. J.**, & Bootsma, R. J. (1989). Fractals: Het einde van Euclides? [Fractals: The fall of Euclid?]. *Psychologie*, 8, 44-49.
- Beek, P. J.** (1989). Jongleren: Makkelijker dan je denkt [Juggling: Easier than you think]. *Psychologie*, 8, 10-16.
- Beek, P. J.** (1991). Neurale netwerken [Neural networks]. *Natuur en Techniek*, 59, 194-205.
- Beek, P. J.**, & Bootsma, R. J. (1992). Waarnemen en bewegen: Een ondeelbare werkelijkheid [Perception and movement: An indivisible reality]. In J. P. Baeyens (Ed.), *Gerontologie & Geriatrie 1992. Proceedings 15th winter meeting Oostende. Belgische Vereniging voor Gerontologie en Geriatrie* (pp. 85-90). Leuven: Garant.
- Ingen Schenau, G. J. van, & **Beek, P. J.** (1993). Bij een formele integratie van wetenschap en fysiotherapie is niemand gebaat [Arguments against a formal integration of science and physiotherapy]. *Geneeskunde en Sport*, 6, 191-195.
- Beek, P. J.**, & de Wit, A. P. (1993). Affordances en architectuur [Affordances and architecture]. In J. A. G. M. Rutten & J. Semah (Eds.), *Third exile* (pp. 29-44). Amsterdam: Arti & Amacitiae.
- Ingen Schenau, G. J. van, & **Beek, P. J.** (1994). Een efficiënt koppel: Spieren over twee gewrichten [An efficient couple: Muscles crossing two joints]. *Natuur en Techniek*, 62, 528-543.
- Beek, P. J.**, & Ingen Schenau, G. J. van (1994). Spontane sprongen [Spontaneous jumps]. *Natuur en Techniek*, 62, 742-753.
- Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1994). Naar een dynamische beschrijving van transities in de perceptueel-motorische ontwikkeling [Towards a dynamical description of transitions in perceptual-motor development]. *Tijdschrift voor Ontwikkelingspsychologie*, 21, 99-127.
- Beek, P. J.** (1995). Achtergronden van coördinatie [Backgrounds of coordination]. *Bulletin voor het Onderwijs in de Biologie*, 26, 217-220.
- Peper, C. E., & **Beek, P. J.** (1996). Spontaan gelijk op [Spontaneously in-sync]. *Psychologie*, 15, 33.
- Coolen, H., Den Brinker, B. P. L. M., Wagenaar, R. C., & **Beek, P. J.** (1996). Manipulatie van optic flow tijdens gaan en rechtop staan in een virtual environment [Manipulation of optic flow during walking and upright standing in a virtual environment]. In B. P. L. M. den Brinker, P. J. Beek, A. P. Hollander, & R. T. Nieuwboer (Eds.), *Zesde Workshop Computers in de Psychologie. Programma & uitgebreide samenvattingen* (pp. 57-60). Amsterdam: IFKB.
- Beek, P. J.** (1996). Jonggeleerd, vaak gedaan. In J. J. de Koning & G. J. P. Savelsbergh (Eds.), *Stilstaan bij bewegen* (p. 56-57). Beek: Natuur & Techniek.
- Peper, C. E., & **Beek, P. J.** (1996). De frustratie tijdens pianoles [The frustration during piano-playing lessons]. In J. J. de Koning & G. J. P. Savelsbergh (Eds.), *Stilstaan bij bewegen* (p. 58-59). Beek: Natuur & Techniek.
- Beek, P. J.**, Rozendal, R. H., & Tamboer, J. W. I. (1997). Wat heeft de LO aan bewegingswetenschappen? [What good are human movement sciences for the practice of physical education?] *Lichamelijke Opvoeding*, 18, 858-859.
- Beek, P. J.** (1997). Boekbespreking van [Book review of] *Human motor development: A lifespan approach* (Payne, V. G., & Isaacs, L. D., Mayfield Publishing Company, 1995, pp. 426). *Bewegen en Hulpverlening*, 14, 216-218.
- Beek, P. J.**, & Daffertshofer, A. (1998). Zelf-organisatie in het brein [Self-organization in the brain]. *Neuropraxis*, 2, 37-41.
- Beek, P. J.**, & Hollander, A. P. (1998). Boekbespreking van [Book review of] *"The biophysical foundations of human movement"* (Abernethy, B., Kippers, V., Mackinnon, L. T. & Hanrahan, S., Human Kinetics Publishers, 1997, pp. 425). *Bewegen en Hulpverlening*, 15, 181-182.
- Beek, P. J.** (2000). Coördinatie, informatie en leren [Coordination, information and learning]. In C. R. van der Togt & M. F. Zweers (Eds.), *Sport, bewegen & gezondheid, Vol. 13* (pp. 29-49). Houten/Diegem: Bohn Stafleu van Loghum.
- Beek, P. J.** (2002). Krachttraining en taakspecificiteit [Force training and task specificity]. *Sportfysiotherapie in Beeld*, 3(2), 8-12.
- Beek, P. J.** (2003). Impliciet of expliciet leren? Strategieën voor het aanleren van perceptueel-motorische vaardigheden [Implicit or explicit learning? Strategies for teaching perceptual-motor skills]. *Coachen*, 24(1), 42-43.
- Beek, P. J.**, Koedijker, J., & Oudejans, R. R. D. (2005). Weten wat je doet, is niet noodzakelijk goed. Impliciet versus expliciet

- leren in de sport. [Knowing what you are doing is not necessarily a good thing. Implicit versus explicit learning in sport]. *Sportgericht*, 59(1), 33-38.
- de Poel, H., Peper, L., & **Beek, P. J.** (2008). Asymmetrie in de coördinatie: simultaan bewegende armen beïnvloeden elkaar, maar niet even sterk. [Asymmetry in coordination: simultaneously moving arms influence each other, but not equally strongly]. *Neuropraxis*, 12(2), 43-49.
- van Delden, A. E. Q., Peper, C. E., Nienhuys, K., Zijp, N. I., **Beek, P. J.**, & Kwakkel, G. (2011). Armtraining na CVA: unilateraal of bilateraal? [Arm training after stroke: unilateral or bilateral?]. *Nederlands Tijdschrift voor Revalidatiegeneeskunde*, 2, 11-16.
- Beek, P. J.** (2011). Nieuwe, praktisch relevante inzichten in techniektraining (deel 1): Motorisch leren: uitgangspunten en overwegingen. *Sportgericht*, 65(1), 43-49.
- Beek, P. J.** (2011). Fundamenten. Motorisch leren. *Fysiopraxis*, 20(5), 35.
- Beek, P. J.** (2011). Nieuwe, praktisch relevante inzichten in techniektraining (deel 2): Motorisch leren: het belang van een externe focus van aandacht. *Sportgericht*, 65(3), 2-5.
- Beek, P. J.** (2011). Fundamenten. Motorisch leren: focus van aandacht. *Fysiopraxis*, 20(7), 37.
- Beek, P. J.** (2011). Nieuwe, praktisch relevante inzichten in techniektraining (deel 3): Motorisch leren: het belang van impliciete kennisopbouw. *Sportgericht*, 65(4), 12-16.
- Beek, P. J.** (2011). Fundamenten. Motorisch leren: expliciete versus impliciete kennis. *Fysiopraxis*, 20(9), 29.
- Beek, P. J.** (2011). Nieuwe, praktisch relevante inzichten in techniektraining (deel 4): Motorisch leren: het belang van contextuele interferentie. *Sportgericht*, 65(5), 2-6.
- Beek, P. J.** (2011). Fundamenten. Motorisch leren: contextuele interferentie. *Fysiopraxis*, 20(11), 35.
- Beek, P. J.** (2011). Nieuwe, praktisch relevante inzichten in techniektraining (deel 5): Motorisch leren: het belang van random variatie in de uitvoering. *Sportgericht*, 65(5), 30-35.
- Beek, P. J.** (2012). Nieuwe, praktisch relevante inzichten in techniektraining (deel 6): Motorisch leren: snelle techniekcorrectie met Old Way New Way. *Sportgericht*, 66(2), 2-5.
- Beek, P. J.** (2012). Fundamenten. Motorisch leren: Old Way, New Way. *Fysiopraxis*, 21(3), 32.
- Beek, P. J.**, & Roerdink, M. (2012). Nieuwe inzichten in motorisch leren voor de fysiotherapeut. *Physios. Praktische nascholing over fysiotherapie*, 4(2), 13-20.
- Beek, P. J.** (2012). Nieuwe, praktisch relevante inzichten in techniektraining (deel 7): Motorisch leren: oefening in combinatie met slapen baart kunst. *Sportgericht*, 66(3), 2-6.
- Beek, P. J.** (2012). Nieuwe, praktisch relevante inzichten in techniektraining (deel 8): Motorisch leren: het belang van observeren en nadoen. *Sportgericht*, 66(4), 2-6.
- Beek, P. J.** (2012). Fundamenten. Motorisch leren: individuele verschillen. *Fysiopraxis*, 21(9), 31.
- Beek, P. J.** (2013). Nieuwe, praktisch relevante inzichten in techniektraining (deel 9): Motorisch leren: het belang van zelfsturing. *Sportgericht*, 67(2), 12-16.
- Beek, P. J.** (2013). Fundamenten. Motorisch leren: het belang van zelfsturing. *Fysiopraxis*, 22(4), 35.
- Beek, P. J.** (2013). Fundamenten. Unilaterale of bilaterale training na CVA? *Fysiopraxis*, 22(8), 34-35.
- Beek, P. J.** (2014). Nieuwe, praktisch relevante inzichten in techniektraining (deel 10): Motorisch leren: individuele verschillen en leerstijlen. *Sportgericht*, 68(3), 2-7.
- Lintmijer, L. L., van Houwelingen, J., Griff E. J., & **Beek, P. J.** (2016). Optimaal door het water: op zoek naar de ideale techniek voor roeien en zwemmen. *Sportgericht*, 70(3), 12-17.
- Ganzevles, S., Daanen, J., **Beek, P. J.**, & Truijens, M. (2016). Een duik in de accelerometrie. *Sportgericht*.
- van der Graaff, E., Van Dis, F., Gasparutto, X., Hoozemans, M., Nijhof, M., **Beek, P. J.**, & Veeger, D. (2016). Project FASTBALL. Snel en blessurevrij leren werpen. *Sportgericht*, 70(3), 38-41.
- Gasparutto, X., van der Graaff, E., Van Dis, F., Hoozemans, M., **Beek, P. J.**, & Veeger, D. (2016). Beter trainen, harder gooien. *Nederlands Tijdschrift voor Natuurkunde*, 82(6), 212-215.
- Van Schooten, K., Pijnappels, M., Rispons, S., Elders, P., Lips, P., Daffertshofer, A., **Beek, P.**, & Van Dieën, J. (2016). Bewegen en vallen: de kwaliteit van het alledaags lopen als voorspeller van vallen bij ouderen. *Tijdschrift voor Human Factors*, 41, 14-19.
- van den Heuvel, M. R. C., Daffertshofer, A., **Beek, P. J.**, Kwakkel, K., & van Wegen, E. H. (2019). Effect van visuele feedback tijdens een dynamische houdingstaak op hersenactiviteit bij mensen met de ziekte van Parkinson. *Neuropraxis*, 4,
- Smit, M. J., Scheffers, M., Emck, C., van Busschbach, J. T., & **Beek, P. J.** (2020). Klinische kenmerken van seksueel misbruikte mensen met een lichte verstandelijke beperking: een literatuuroverzicht. *Tijdschrift voor Psychiatrie*, 62(10), 878-887.
- Beek, P. J.**, & Roerdink, M. (2022). Motorisch leren voor de fysiotherapeut: conceptueel kader en toepassing. *Physios. Praktische nascholing over fysiotherapie*, 14(1), 4-14.
- Beek, P. J.** (2022). Motorisch leren, een update. Deel 1: Drie aanleidingen en twee generieke beschouwingen. *Sportgericht*, 76(5), 2-6.
- Beek, P. J.** (2022). Motorisch leren, een update. Deel 2: Externe focus van aandacht. *Sportgericht*, 76(6), 3-8.
- Beek, P. J.** (2023). Motorisch leren, een update. Deel 3: Impliciet leren. *Sportgericht*, 77(1), 2-8.
- Minkels, C., van der Kamp, J., & **Beek, P. J.** (2023). Op weg naar de zwemles van de toekomst. *Sportgericht*, 77(1), 45-48.
- Beek, P. J.** (2023). Motorisch leren, een update. Deel 4: Variabel oefenen volgens de schematheorie. *Sportgericht*, 77(3), 2-9.
- Beek, P. J.** (2023). Motorisch leren, een update. Deel 5: Contextuele interferentie, een mythe? *Sportgericht*, 77(4), 16-21.

#### Chapters in books and proceedings (74)

- Beek, P. J.** (1986). Perception-action coupling in the young infant: An appraisal of von Hofsten's research programme. In M. G. Wade & H. T. A. Whiting (Eds.), *Motor development in children: Aspects of coordination and control* (pp. 187-196). Dordrecht: Martinus Nijhoff.
- Beek, P. J., & Meijer, O. G.** (1988). On the nature of the motor-action controversy. In O. G. Meijer & K. Roth (Eds.), *Complex movement behaviour: 'The' motor-action controversy* (pp. 157-185). Amsterdam: North-Holland.
- Beek, P. J.** (1988). Exploring the dynamics of juggling. In A. M. Colley & J. R. Beech (Eds.), *Cognition and action in skilled behaviour* (pp. 229-246). Amsterdam: North-Holland.
- Beek, P. J., & Beek, W. J.** (1989). Tools for constructing dynamical models of rhythmic movement. In P. N. Kugler (Ed.), *Self-organization in biological work spaces* (pp. 205-246). Amsterdam: North-Holland. (see also Articles in Refereed Journals).
- Turvey, M. T., & **Beek, P. J.** (1990). Invariants of perception and action. *Proceedings of the Sixth Yale Workshop on Adaptive and Learning Systems* (pp. 201-205). Yale University, New Haven.
- Beek, W. J., & **Beek, P. J.** (1991). Task studies tweaking the perception-action cycle. In R. Jacobs & W. E. I. Rikkert (Eds.), *Motor control: An interdisciplinary forum* (pp. 33-49). Amsterdam: VU University Press.
- Beek, P. J.** (1991). Modelling complexity: A complicated business. In R. Jacobs & W. E. I. Rikkert (Eds.), *Motor control: An interdisciplinary forum* (pp. 91-96). Amsterdam: Vrije Universiteit Press.
- Peper, C. E., **Beek, P. J.**, & van Wieringen, P. C. W. (1991). Bifurcations in bimanual tapping: In search of Farey principles. In J. Requin & G. E. Stelmach (Eds.), *Tutorials in motor neuroscience* (pp. 413-431). N.A.T.O. ASI Series. Dordrecht: Kluwer.
- Peper, C. E., **Beek, P. J.**, & van Wieringen, P. C. W. (1991). Bifurcations in polyrhythmic tapping. In P. J. Beek, R. J. Bootsma, & P. C. W. van Wieringen (Eds.), *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action* (pp. 325-329). Amsterdam: Rodopi.
- van Riel, M.-J., **Beek, P. J.**, & van Wieringen, P. C. W. (1991). Phase transitions in rhythmic arm movements under different stimulus-response configurations. In P. J. Beek, R. J. Bootsma, & P. C. W. van Wieringen (Eds.), *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action* (pp. 234-238). Amsterdam: Rodopi.
- Rikkert, W. E. I., **Beek, P. J.**, & Beek, W. J. (1991). In search of a physical underpinning of the coupling constants in coordinated rhythmic movements. In P. J. Beek, R. J. Bootsma, & P. C. W. van Wieringen (Eds.), *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action* (pp. 310-315). Amsterdam: Rodopi.
- Rikkert, W. E. I., **Beek, P. J.**, & van Wieringen, P. C. W. (1991). Limit cycle properties of coordinated rhythmic movements are limb-specific. In P. J. Beek, R. J. Bootsma, & P. C. W. van Wieringen (Eds.), *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action* (pp. 306-309). Amsterdam: Rodopi.
- van Santvoord, A. A. M., **Beek, P. J.**, & Bootsma, R. J. (1991). Looking for place-of-contact information in a parabolic flight trajectory. In P. J. Beek, R. J. Bootsma, & P. C. W. van Wieringen (Eds.), *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action* (pp. 115-120). Amsterdam: Rodopi.
- Beek, P. J.**, Peper, C. E., & van Wieringen, P. C. W. (1992). Frequency locking, frequency modulation, and bifurcations in dynamic movement systems. In G. E. Stelmach & J. Requin (Eds.), *Tutorials in motor behavior* (pp. 599-622). Amsterdam: North-Holland.
- Wimmers, R. H., **Beek, P. J.**, & van Wieringen, P. C. W. (1992). Phase transitions in rhythmic tracking movements: A case of unilateral coupling. In A. J. W. M. N. Thomassen, D. A. Rosenbaum, & P. C. W. van Wieringen (Eds.), *Sequencing and timing of human movement* (pp. 217-226). Amsterdam: North-Holland. (see also Articles in Refereed Journals).
- Beek, P. J.** (1992). Inadequacies of the proportional duration model: Perspectives from a dynamical analysis of juggling. In A. J. W. M. N. Thomassen, D. A. Rosenbaum, & P. C. W. van Wieringen (Eds.), *Sequencing and timing of human movement* (pp. 227-238). Amsterdam: North-Holland. (see also Articles in Refereed Journals).
- Hopkins, B., **Beek, P. J.**, & Kalverboer, A. F. (1993). Theoretical issues in the longitudinal study of motor development. In A. F. Kalverboer, B. Hopkins, & R. H. Geuze (Eds.) *Motor development in early and later childhood: Longitudinal approaches* (pp. 343-371). Cambridge: Cambridge University Press.
- Beek, P. J.**, Hopkins, B., & Molenaar, P. C. M. (1993). Complex systems approaches to the development of action. In G. J. P. Savelsbergh (Ed.), *The development of coordination in infancy* (pp. 497-515). Amsterdam: North-Holland.
- Turvey, M. T., Schmidt, R. C., & **Beek, P. J.** (1993). Fluctuations in interlimb rhythmic coordinations. In K. M. Newell (Ed.), *Variability and motor control* (pp. 381-411). Champaign, IL: Human Kinetics Publishers.
- van Santvoord, A. A. M., & **Beek, P. J.** (1993). Optical information for cascade juggling. In S. S. Valenti, & J. B. Pittenger (Eds.), *Studies in perception and action. Posters presented at the VIIth International Conference on Event Perception and Action* (pp. 315-319). Hillsdale: Lawrence Erlbaum Publishers.
- Peper, C. E., **Beek, P. J.**, & van Wieringen, P. C. W. (1993). Training effects on coupling strength in bimanual rhythmical performance. In S. S. Valenti, & J. B. Pittenger (Eds.), *Studies in perception and action II. Posters presented at the VIIth International Conference on Event Perception and Action* (pp. 202-205). Hillsdale: Lawrence Erlbaum Publishers.
- van Santvoord, A. A. M., & **Beek, P. J.** (1993). Phasing and the pick-up of visual information in cascade juggling. In S. Serpa, J. Alves, V. Ferreira, & A. Paula-Brito (Eds.), *Proceedings of the 8th World Congress of Sport Psychology* (pp. 985-988).

Lisbon.

- Peper, C. E., **Beek, P. J.**, & van Wieringen, P. C. W. (1993). Bimanual rhythmic performance: Mastering the interaction between the hands. In C. A. M. Doorenbosch et al. (Eds.), *Learning motor skills: Proceedings of the third symposium of the Graduate Institute of Human Movement* (pp. 94-99). Amsterdam: CopyPrint 2000.
- Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1993). Stability and change in the development of prehension: A dynamical approach. In C. A. M. Doorenbosch et al. (Eds.), *Learning motor skills: Proceedings of the third symposium of the Graduate Institute of Human Movement* (pp. 100-103). Amsterdam: CopyPrint 2000.
- Baron, R. M., Amazeen, P. G., & **Beek, P. J.** (1994). Local and global dynamics of social relations. In R. R. Vallacher & A. Nowak (Eds.), *Dynamical systems in social psychology* (p. 111-138). New York: Academic Press.
- Den Brinker, B. P. L. M., Coolen, H., & **Beek, P. J.** (1994). FAMS-lab: A management environment for the acquisition and processing of movement data. In F. J. Maarse, A. E. Akkerman, A. M. Brand, L. J. M. Mulder, & M. J. van der Stelt (Eds.), *Computers in psychology: Applications, methods and instruments* (p. 230-240). Lisse: Swets & Zeitlinger.
- Beek, P. J.**, & Sternad, D. (1994). Koordination und Kontrolle von sportmotorischen Fertigkeiten aus ökologischer Perspektive [An ecological perspective on the coordination and control of sport motor skills]. In K.-H. Leist, D. Hackfort, & J. Loibl (Eds.), *Ordnungs- und Organisationsleistungen menschlicher Motorik* (pp. 73-84). München: TU-Verlag.
- Michaels, C. F., & **Beek, P. J.** (1994). The state of ecological psychology. In: *Program and Proceedings of the Third European Workshop on Ecological Psychology* (p. 1-21). Ruhr-University Bochum, FR Germany.
- Beek, P. J.**, Peper, C. E., Post, A. A., & Reijnen, J. S. (1995). Orbital stability of rhythmic forearm movements. In B. Bardi, R. J. Bootsma, & Y. Guiard (Eds.), *Studies in perception and action III* (pp. 75-78). Hillsdale: Lawrence Erlbaum Publishers.
- Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1995). Preliminary evidence for a developmental transition from reaching to grasping proper. In B. Bardi, R. J. Bootsma, & Y. Guiard (Eds.), *Studies in perception and action III* (pp. 107-110). Hillsdale: Lawrence Erlbaum Publishers.
- Beek, P. J.**, & van Santvoord, A. A. M. (1996). Dexterity in cascade juggling. In M. Latash & M. T. Turvey (Eds.), *Dexterity and its development* (pp. 377-391). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Den Brinker, B. P. L. M., Coolen, H., & **Beek, P. J.** (1996). Managing the acquisition, processing and analysis of movement data. In B. P. L. M. den Brinker, P. J. Beek, A. P. Hollander, & R. T. Nieuwboer (Eds.), *Zesde Workshop Computers in de Psychologie. Programma & uitgebreide samenvattingen* (pp. 44-45). Amsterdam: IFKB.
- Post, A. A., & **Beek, P. J.** (1997). Measuring entropy in cascade juggling. In M. A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action IV. ICPA 9 Poster Book* (pp. 253-256). Hillsdale: Lawrence Erlbaum Publishers.
- Peper, C. E., & **Beek, P. J.** (1997). The role of amplitude in frequency-induced transitions. In M. A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action IV. ICPA 9 Poster Book* (pp. 267-270). Hillsdale: Lawrence Erlbaum Publishers.
- Beek, P. J.**, Peper, C. E., van Soest, A. J., Daffertshofer, A., & Meijer, O. G. (1998). Studying perceptual-motor actions from mutually constraining perspectives (pp. 93-112). In A. A. Post, J. R. Pijpers, P. Bosch, & M. S. J. Boschker (Eds.), *Models in human movement sciences. Proceedings of the Second Symposium of the Institute for Fundamental and Clinical Human Movement Sciences*. Enschede: PrintPartners Ipskamp.
- Amazeen, E. L., Amazeen, P. G., Post, A. A., & **Beek, P. J.** (1998). Timing the selection of visual information in rhythmic throwing. In B. Bril, A. Ledebt, G. Dietrich, & A. Roby-Brami (Eds.), *Advances in perception-action coupling. Fifth European Workshop on Ecological Psychology* (pp. 85-89). Paris: Éditions EDK.
- Amazeen, P. G., Amazeen, E. L., & **Beek, P. J.** (1998). The effect of experience on locomotor-respiratory coupling during wheelchair propulsion. In B. Bril, A. Ledebt, G. Dietrich, & A. Roby-Brami (Eds.), *Advances in perception-action coupling. Fifth European Workshop on Ecological Psychology* (pp. 123-127). Paris: Éditions EDK.
- Peper, C. E., & **Beek, P. J.** (1998). Examining the role of movement amplitude in rhythmic coordination. In B. Bril, A. Ledebt, G. Dietrich, & A. Roby-Brami (Eds.), *Advances in perception-action coupling. Fifth European Workshop on Ecological Psychology* (pp. 147-151). Paris: Éditions EDK.
- Barr, R. G., **Beek, P. J.**, & Calinoui, N. (1999). Challenges to nonlinear modelling of infant emotion regulation in real and developmental time. In G. J. P. Savelsbergh, H. van der Maas, & P. van Geert (Eds.), *Non-linear developmental processes* (pp. 15-37). Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1999). A catastrophic change in the early development of prehension? In G. J. P. Savelsbergh, H. van der Maas, & P. van Geert (Eds.), *Non-linear developmental processes* (pp. 125-136). Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- van den Berg, C., **Beek, P. J.**, van Wieringen, P. C. W., & Wagenaar, R. C. (1999). Rhythmic forearm movements of Parkinson patients. In M. Grealy & J. Thomson (Eds.), *Studies in Perception and Action V* (pp. 301-305). Mahwah, NJ: Lawrence Erlbaum Associates.
- Amazeen, P. G., Amazeen, E. L., & **Beek, P. J.** (1999). Locomotor-respiratory coupling during manual wheelchair propulsion. In L. H. V. van der Woude, M. T. E. Hopman, & C. H. van Kemenade (Eds.), *Ergonomics of manual wheelchair propulsion. The state of the art II* (pp. 202-207). Amsterdam: IOS Press.
- Den Brinker, B. P. L. M., **Beek, P. J.**, & Coolen, H. (1999). A note on the design and use of low vision aids for reading and searching information. In B. P. L. M. den Brinker, P. J. Beek, A. N. Brand, F. J. Maarse, & L. J. M. Mulder (Eds.), *Cognitive ergonomics, clinical assessment and computer-assisted learning. Computers in Psychology 6* (pp. 51-63). Lisse: Swets & Zeitlinger.
- Den Brinker, B. P. L. M., Broere, Y. J., & **Beek, P. J.** (2000). Space scaling behavior and preferred retinal character size

- during reading. In C. Stuenkel, A. Arditi, A. Horowitz, M. A. Lang, B. Rosenthal, & K. Seidman (Eds.), *Vision rehabilitation. Assessment, intervention and outcomes. Selected papers from Vision '99: International Conference on Low Vision, July 1999* (pp. 302-305). Lisse: Swets & Zeitlinger.
- Beek, P. J.**, Peper, C. E., & Daffertshofer, A. (2000). Timekeepers versus nonlinear oscillators: How the approaches differ. In P. Desain & L. Windsor (Eds.), *Rhythm perception and production* (pp. 9-33). Lisse: Swets & Zeitlinger.
- Peper, C. E., **Beek, P. J.**, & Daffertshofer, A. (2000). Considerations regarding a comprehensive model of (poly)rhythmic movements. In P. Desain & L. Windsor (Eds.), *Rhythm perception and production* (pp. 35-49). Lisse: Swets & Zeitlinger.
- Jansen, C., Peper, C. E., & **Beek, P. J.** (2000). Limitations of the scanning procedure in assessing changes in coordination dynamics due to learning. In P. Desain & L. Windsor (Eds.), *Rhythm perception and production* (pp. 51-68). Lisse: Swets & Zeitlinger.
- Beek, P. J.** (2001). Stilstaan bij Bewegen. II. Gecoördineerd bewegen. In J. J. de Koning & G. J. P. Savelsbergh (Eds.), *Stilstaan bij bewegen* (p. 17-23). Beek: Natuur & Techniek.
- Beek, P. J.**, & Peper, C. E. (2001). Jonggeleerd, vaak gedaan. In J. J. de Koning & G. J. P. Savelsbergh (Eds.), *Stilstaan bij bewegen* (p. 56-57). Beek: Natuur & Techniek.
- Wing, A. M., & **Beek, P. J.** (2002). Movement timing: A tutorial. In W. Prinz & B. Hommel (Eds.), *Common mechanisms in perception and action. Attention and Performance, Vol. XIX* (pp. 202-226). Oxford: Oxford University Press.
- Beek, P. J.**, Jacobs, D., Daffertshofer, A., & Huys, R. (2003). Expert performance in sport: Views from the joint perspectives of ecological psychology and dynamical systems theory. In J. Starkes & A. Ericsson (Eds.), *Expert performance in sport* (pp. 321-344). Champaign, Ill.: Human Kinetics.
- Ridderikhoff, A., Peper, C. E., Carson, R. G., & **Beek, P. J.** (2003). Musculoskeletal dynamics of the wrist during rhythmic activity. In S. Rogers, and J. Effken (Eds.), *Studies in Perception and Action VII* (pp. 65-68). Mahwah, NJ: Lawrence Erlbaum Associates.
- Dessing, J. C., Peper, C. E., & **Beek, P. J.** (2003). A comparison of real catching with catching in a CAVE. In S. Rogers, and J. Effken (Eds.), *Studies in Perception and Action VII* (pp. 145-148). Mahwah, NJ: Lawrence Erlbaum Associates.
- Frank, T. D., & **Beek, P. J.** (2003). A mean-field approach to self-organization in spatially extended perception-action and psychological systems. In W. Tschacher & J.-P. Dauwalder (Eds.), *Studies of nonlinear phenomena in life science, Vol. 10. The dynamical systems approach to cognition. Concepts and empirical paradigms based on self-organization, embodiment, and coordination dynamics* (pp. 159-179). Singapore: World Scientific.
- Peper, C. E., Daffertshofer, A., & **Beek, P. J.** (2004). Dynamical models of rhythmic interlimb coordination. A focus on pattern (in)stability. In S. P. Swinnen & J. Duysens (Eds.), *Neurobehavioral determinants of interlimb coordination* (297-323). Dordrecht: Kluwer Academic Publishers.
- Huys, R., Daffertshofer, A., & **Beek, P. J.** (2004). The evolution of coordination during skill acquisition: The dynamical systems approach. In A. M. Williams, N. J. Hodges, M. A. Scott, & M. L. J. Court (Eds.), *Acquisition in sport: Research, theory and practice* (pp. 351-373). London: Routledge.
- Frank, T. D., Peper, C. E., Daffertshofer, A., & **Beek, P. J.** (2005). Variability of brain activity during rhythmic unimanual finger movements. In K. Davids, S. Bennett & K. M. Newell (Eds.), *Movement system variability* (pp. 271-305). Champaign-Urbana, Ill.: Human Kinetic Publishers.
- Michielsen, M. E., Stins, J. F., Roerdink, M., & **Beek, P. J.** (2007). Effects of cognition and expertise on postural sway regularity. In S. Cummins-Sebree, M. A. Riley, & K. Shockley (Eds.), *Studies in perception and action IX. Fourteenth International Conference on Perception and Action* (pp. 127-130). New York: Lawrence Erlbaum Associates (Taylor & Francis Group).
- van de Langenberg, Kingma, I., & **Beek, P. J.** (2007). Evidence for the salience hypothesis in dynamic touch. In S. Cummins-Sebree, M. A. Riley, & K. Shockley (Eds.), *Studies in perception and action IX. Fourteenth International Conference on Perception and Action* (pp. 164-167). New York: Lawrence Erlbaum Associates (Taylor & Francis Group).
- Daffertshofer, A., Boonstra, T. W., & **Beek, P. J.** (2007). Cortical beta synchronization is related to low-order motor parameters. *International Congress Series, 1300*, 329-332.
- Houweling, S., Daffertshofer, A., van Dijk, B. W., & **Beek, P. J.** (2007). Synchronization in perceptual-motor integration. *International Congress Series, 1300*, 333-336.
- Dieën, J. H. van, Selen, L. P. J., & **Beek, P. J.** (2008). Suppression of neuromuscular noise through impedance modulation. In D. A. de Jong (Ed.), *Progress in biological cybernetics* (pp. 137-160). New York: Nova Publishers.
- Debats, N. B., Kingma, I., **Beek, P. J.**, & Smeets, J. B. J. (2010). Muscular torque can explain biases in haptic length perception: A model study on the radial-tangential illusion. In A. M. L. Kappers, J. B. F. van Erp, W. M. B. Tiest, & F. C. T. van der Helm (Eds.), *Haptics: Generating and perceiving tangible sensations, Part II, Proceedings. Book Series: Lecture Notes in Computer Science* (6192, pp. 392-397). Heidelberg: Springer Verlag.
- Emck, C., Bosscher, R., van Wieringen, P., **Beek, P.**, & Dorelijers, Th. (2010). Opvallend, onhandig, onbesuisd of onzeker? Psychomotorische kenmerken van kinderen met psychiatrische stoornissen. In J. de Lange (Red.), *Psychomotorische therapie. Lichaams- en bewegingsgerichte interventies in de ggz* (pp. 195-226). Amsterdam: Uitgeverij Boom.
- Debats, N. B., Kingma, I., & **Beek, P. J.**, & Smeets, J. B. J. (2012). The precision of 'haptic' rod length perception is reduced by lack of visual preview. In P. Isokoski & J. Springare (Eds.), *Haptics: Perception, devices, mobility, and communication* (pp. 19-24). Heidelberg: Springer Verlag.
- Beek, P. J.** (2013). Theorieën over motorisch leren en handelen. A. Motorisch leren. In R. van Empelen, R. Nijhuis-van der

- Sanden en A. Hartman (Red.), *Kinderfysiotherapie* (pp. 29-41). Amsterdam: Reed Business Education.
- Beek, P. J., & Daffertshofer, A.** (2014). Dynamical systems. In R. C. Eklund and G. Tenenbaum (Eds.), *Encyclopedia of Sport and Exercise Psychology, Vol. 1* (pp. 223-227). Los Angeles, CA: Sage publications.
- Daffertshofer, A., & **Beek, P. J.** (2014). Modeling. In R. C. Eklund and G. Tenenbaum (Eds.), *Encyclopedia of Sport and Exercise Psychology, Vol. 2* (pp. 444-448). Los Angeles, CA: Sage publications.
- Beek, P. J., & Roerdink, M.** (2014). Evolving insights into motor learning and their implications for neurorehabilitation. In M. Selzer, S. Clarke, L. Cohen, G. Kwakkel, and R. Miller (Eds.), *Textbook of neural repair and rehabilitation* (pp. 95-104). Cambridge: Cambridge University Press.
- Truong, K. P., Nieuwenhuys, A., **Beek, P.**, & Evers, V. (2015). A database for analysis of speech under physical stress: detection of exercise intensity while running and talking. *Proceedings of Interspeech* (pp. 3705-3709). 16<sup>th</sup> Annual Conference of the International Speech Communication Association (ISCA), Interspeech 2015. Baixas, France: International Speech Communication Association.
- Dukalski, R., Lukosch, S., Schwab, A., Bregman, D., **Beek, P. J.**, & Brazier, F. M. (2020). Exploring the effect of pacing plan feedback for professional road cycling. International Sports Engineering Association 2020.
- Beek, P. J.** (2023). Hurdles to clear in sports science support. In I. Vermeulen (Ed.), *Connected World: insights from 100 academics on how to build better connections* (pp. 63-66). Amsterdam: VU University Press.
- Koster, E., & Beek, P. J.** (2023). Wat is wetenschap?
- Beek, P. J.** (2023). Bewegingswetenschappen is een discipline.

#### Books/Edited volumes

- Meijer, O. G., & **Beek, P. J.** (1980). *Inleiding onderzoeksmethodiek (Deel I en II)* [An introduction to research methods—Part I and II]. Amsterdam: VU-Boekhandel.
- Beek, P. J.** (1989). *Juggling dynamics*. PhD Thesis. Faculty of Human Movement Sciences. Amsterdam: Vrije Universiteit Press. (ISBN 90-6256-849-1)
- Beek, P. J., Bootsma, R. J., & van Wieringen, P. C. W.** (Eds., 1991). *Studies in perception and action. Posters presented at the VI International Conference on Event Perception and Action*. Amsterdam: Rodopi. (ISBN 90-9004424-8)
- Beek, P. J., & van Wieringen, P. C. W.** (Eds., 1994). *Perception-movement, information and dynamics*. Special Issue of Human Movement Science. Amsterdam: North-Holland.
- Brinker, B. P. L. M. den, **Beek, P. J.**, Hollander, A. P., & Nieuwboer, R. T. (Eds., 1996). *Zesde Workshop Computers in de Psychologie. Programma & uitgebreide samenvattingen*. Amsterdam: IFKB. (ISBN 90-9009529-2)
- Beek, P. J.** (1998). *Sturen en coördineren*. Inaugurele rede. Amsterdam: Vrije Universiteit.
- Brinker, B. P. L. M. den, **Beek, P. J.**, Brand, A. N., Maarse, F. J., & Mulder, L. J. M. (Eds., 1999). *Cognitive ergonomics, clinical assessment and computer-assisted learning. Computers in Psychology, Vol. 6*. Lisse: Swets & Zeitlinger.
- Beek, P. J., & van de Langenberg, R.** (Eds., 2007). *European Workshop on Movement Science. Book of Abstracts 2007*. Köln: Sportverlag Strauß.

#### Technical reports

- Beek, P. J., & Beek, W. J.** (1987). A catalogue of nonlinear friction and elastic functions. *PAW-Review. A technical report of the Perceiving-Action Workshop in Ecological Psychology, 2(2)*, 6-9.
- Beek, P. J.** (1988). Tesselation of time in juggling and walking. *PAW-Review. A technical report of the Perceiving-Action Workshop in Ecological Psychology, 3(1)*, 22-25. **Beek, P. J.** (1988). Discretizing the continuous in juggling. *PAW-Review. A technical report of the Perceiving-Action Workshop in Ecological Psychology, 3(2)*, 54-58.
- Wimmers, R. H., Savelsbergh, G. J. P., **Beek, P. J.**, & Hopkins, B. (1994). Are there phase transitions in the development of eye- hand coordination? *Annual Report 1992-1993, Research and Clinical Center for Child Development, Faculty of Education, Hokkaido University, 16*, 123-130.
- Beek, P. J., Schmidt, R. C., Morris, A. W., Sim, M.-Y., & Turvey, M. T.** (in press). Determining stiffness and friction terms in the pendular clocking mode of coordination. *PAW-Review. A technical report of the Perceiving-Action Workshop in Ecological Psychology*.
- Dessing, J. C., Bullock, D., Peper, C. E., & **Beek, P. J.** (2001). A neural circuit model for prospective control of reaching. *Technical Report CAS/CNS-01-08*. Boston University Center for Adaptive Systems and Department of Cognitive and Neural Systems. Boston, USA.

#### Organization of professional symposia and conferences (17)

- Bingham, G. P., Kay, B., & **Beek, P. J.**, *Dynamical models of perception-action systems*. Symposium organized at the Vth International Conference on Event Perception and Action, Oxford, Miami, OH, U.S.A., 1989.
- Beek, P. J.**, *On the origin of temporal order in movement coordination*. Symposium organized at the Faculty of Human Movement Sciences, Vrije Universiteit of Amsterdam, The Netherlands, 1989.
- Beek, P. J., Bootsma, R. J., van Wieringen, P. C. W., & Reijmers, M.**, *The VIth International Conference on Event Perception and Action*, Faculty of Human Movement Sciences, Vrije Universiteit of Amsterdam, The Netherlands, 1991.
- Beek, P. J., & Bootsma, R. J.**, *Ball skills*. Symposium organized at the VIth International Conference on Event Perception and Action, Faculty of Human Movement Sciences, Vrije Universiteit of Amsterdam, The Netherlands, 1991.

- Beek, P. J.**, & Guiard, Y., *Stability, (a)symmetry, and constraints in two-effector coordination*. Symposium organized at the Second European Conference on Ecological Psychology, University of Strathclyde, Glasgow, Scotland, 1992.
- Beek, P. J.**, Riccio, G., & Newell, K. M., *Affordances and task constraints in intentional systems*. Symposium organized at the VIIIth International Conference on Event Perception and Action, University of British Columbia, Canada, 1993.
- Ingen Schenau, G. J. van, & **Beek, P. J.**, *Coordination of multi-joint movement*. Symposium organized at the Second World Congress of Biomechanics, Amsterdam, The Netherlands, 1994.
- Brinker, B. P. L. M. den, **Beek, P. J.**, Hollander, A. P., & Nieuwboer, R. T., *Zesde Workshop Computers in de Psychologie*. Amsterdam, The Netherlands, 1996.
- Beek, P. J.**, *Synergetics of perceptual-motor actions*. Workshop organized at the Faculty of Human Movement Sciences and the Institute for Fundamental and Clinical Human Movement Sciences, Amsterdam, The Netherlands, 1998.
- Peper, C. E., & **Beek, P. J.**, *Timekeepers versus oscillators*. Symposium organized at the Tenth International Conference on Perception and Action, University of Edinburgh, Edinburgh, Scotland, 1999.
- Beek, P. J.**, *Rhythmic interlimb coordination: Dynamics, neural underpinnings and cognition*. Workshop organized at the Faculty of Human Movement Sciences and the Institute for Fundamental and Clinical Human Movement Sciences, Amsterdam, The Netherlands, 2000.
- Beek, P. J.**, *Control of interceptive actions*. Workshop organized at the Faculty of Human Movement Sciences and the Institute for Fundamental and Clinical Human Movement Sciences, Amsterdam, The Netherlands, 2005.
- Beek, P. J., *On the coordination dynamics of skill acquisition: A neglected dimension of expertise*. Symposium organized at the Eleventh European College of Sport Science, Lausanne, Switzerland, July 6-July 8, 2006.
- Beek, P. J., Schöllhorn, W., & Verwey, W., *Third European Workshop on Movement Science (EWOMS)*, Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, May 31-June 2, 2007.
- Beek, P.J., organization of plenary session "The choreography of movement and the brain", with presentations by Scott Kelso and Scott DeLahunta), *18th Annual Congress of the European College of Sport Science, ECSS Barcelona 2013, Unifying Sport Science*, The National Institute of Physical Education of Catalonia (INEFC), June 26-June 29, 2013.
- De Haan, A., van Mechelen, W., & Beek, P.J. (congress presidents), *19th Annual Congress of the European College of Sport Science, ECSS Amsterdam 2014, Sport Science Around the Canals*, Faculty of Human Movement Sciences, Vrije Universiteit Amsterdam, and Faculty of Medicine, VU Medical Center, July 2-July 5, 2014.
- Smeets, J. B. J., & Beek, P. J., *Progress in Motor Control XII 2019: Movement improvement*. Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam and Amsterdam UMC, July 7-July 10, 2019.