

## CURRICULUM VITAE

**NAME** J.A. Scott Kelso  
Glenwood and Martha Creech Eminent Scholar Chair in Science  
Professor of Psychology and Neuroscience  
Professor of Biological Sciences  
Professor of Biomedical Sciences  
Florida Atlantic University  
Boca Raton, Florida 33431

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**BORN** February 27, 1947  
Derry, N. Ireland

**CITIZENSHIP**  
United States (Currently hold US, UK and Irish Passports)

**EDUCATION**  
University of Wisconsin, Madison, Ph.D. 1975  
University of Wisconsin, Madison, M.Sc. 1973  
University of Calgary, Alberta, Canada B.S. 1972  
Stranmillis University College, Queens University Belfast, N. Ireland 1965-1969

### ACADEMIC POSITIONS

2009- Professor of Computational Neuroscience, University of Ulster (Emeritus, 2016)

1985- Glenwood and Martha Creech Eminent Scholar Chair in Science  
Professor of Complex Systems & Brain Sciences, Professor of Psychology and Neuroscience, Professor of Biological Sciences, Professor of Biomedical Sciences, Florida Atlantic University, Boca Raton, FL

1985-2005 Founder and Director, Center for Complex Systems and Brain Sciences

1995 Co-Director, Santa Fe Institute Summer School in Complex Systems

2000 Distinguished Visiting Professor, University of Marseille

1982-85 Senior Research Staff, Haskins Laboratories, Yale University  
Professor, Departments of Psychology and Biobehavioral Sciences (Behavioral Genetics Unit), University of Connecticut.

- 1986 Guest Professor, USSR Academy of Sciences, Moscow
- 1984 Guest Professor, Institute for Theoretical Physics, University of Stuttgart
- 1983 INSERM Research Professor, Lyons, France
- 1978-82 Senior Research Staff, Haskins Laboratories, Yale University  
Associate Professor, Departments of Psychology and Biobehavioral Sciences (Unit of Behavioral Genetics), University of Connecticut
- 1976-78 Assistant Professor and Director, Motor Behavior Laboratory  
The University of Iowa
- 1976 Invited Assistant Professor (Summer Semester)  
The University of Texas at Austin
- 1969-71 Schoolmaster, Coleraine Academical Institution, Coleraine, N. Ireland

## HONORS AND AWARDS

- 2016 Elected Honorary Member of The Royal Irish Academy (Hon MRIA)
- 2016 Emeritus Distinguished Professor Award, Ulster University
- 2016 Member of World Economic Forum (Brain Research and Neurotechnologies)
- 2012 Fellow of The Society of Experimental Psychologists (SEP)
- 2011 Bernstein Prize, International Society of Motor Control (ISMC)
- 2010 Cathedra Chair, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil
- 2008-2009 President, Foyle College (est. 1617) Former Pupils Association
- 2007 Pierre de Fermat Laureate
- 2007 Geraldine Pellicchia Memorial Lecture on Coordination and Cognition, University of Connecticut
- 2006 Director's Innovations Award, National Institute of Mental Health
- 2005 A.S. Iberall Memorial Lecture, University of Connecticut
- 2005 F.J. McGuigan Prize Lecture, American Psychological Association
- 2004 Fellow, AAAS: "For innovative use of brain imaging and behavioral techniques to uncover the principles and mechanisms of coordination"
- 2002 Docteur Honoris Causa, Republic of France and University of Toulouse (estab.1228)
- 2001 Neurosciences Research Program Fellow, La Jolla, CA
- 2000 *Rugby* Magazine, Feb 29, Voted All-time All-American USA Eagles
- 2000 Distinguished Lecture Series, International School for Computable Economics, Trento
- 1999 US Delegation to inaugurate the National Brain Research Institute of India, New Delhi

- 1999 Distinguished Scientist Award, NASPSPA  
 1999 Smithsonian Institution Lecturer, Washington, DC  
 1999 Brain Bursary Lectures, London, UK  
 1998 Invited Fellow, Center for Advanced Studies in the Behavioral Sciences  
 1997 Senior Scientist Award, National Institute of Mental Health  
 1997 MERIT Award, National Institute of Mental Health  
 1997 Visiting Fellow, The Neurosciences Institute, San Diego, CA.  
 1996 Professorial Excellence Award, State University System of Florida.  
 1996 Sir Runrun Shaw Fellow, Chinese University of Hong Kong  
 1995-1999 President, South Florida Chapter, Sigma Xi (Scientific Research Society)  
 1991 W.J. Bryan Lectures in Cognitive Science, Indiana University  
 1990 Founding Fellow, American Psychological Society  
 1990 Distinguished Alumni Research Achievement Award, The University of Wisconsin, Madison (rec'd from Chancellor Donna Shalala)  
 1989 Kenwood-Smith Lectures, University of North Carolina  
 1989 Centennial Lecture, University of Tokyo, Japan  
 1986 Fellow, American Psychological Association  
 1986 American Society of Biomechanics (Honorary member)  
 1984 Nominated Fellow, Center for Advanced Study in the Behavioral Sciences  
 1984 Fellow, Center for Interdisciplinary Research (ZIF), Bielefeld, FRG.  
 1979 Fellow, NATO Advanced Study Institute on Motor Control, Senanque, France.  
 1977 Old Gold Fellow, University of Iowa.  
 1973-1975 University Research Fellow, University of Wisconsin, Madison.

## PROFESSIONAL SOCIETIES

American Association for the Advancement of Science (Fellow)  
 American Psychological Association, Divisions 1 and 3 (Fellow)  
 American Psychological Society (Fellow)  
 International Neural Network Society  
 Psychonomic Society  
 Associate, Behavioral and Brain Sciences  
 Sigma Xi, Scientific Research Society  
 American Society of Biomechanics (Honorary member)  
 Society for Neuroscience  
 International Society of Motor Control  
 New York Academy of Sciences

## EDITORSHIPS

- 1981-1988 Executive Editor, *Journal of Motor Behavior*  
 1981-1989 Editorial Board, *Journal of Experimental Psychology: Human Perception and Performance*  
 1981- Editorial Board, *Journal of Motor Behavior*  
 1988- Editorial Board (Founding Member) *Neural Networks*.

- 1990-2000 Editorial Board, *International Journal of General Systems*  
 1992- Editorial Board, *Human Movement Science*  
 1996-2007 Editorial Board, *Motor Control*  
 2002- Editorial Board, *Chaos and Complexity Letters*  
 2002- Founding Editor, *Understanding Complex Systems*, Springer, Berlin-Heidelberg  
 2004- Editorial Board, *Cognitive Processing*  
 2006- Editorial Board, *Springer Series in Synergetics*  
 2011- Editorial Board, *Cognitive Systems Monographs (COSMOS)*, Springer Verlag  
 2013- Editorial Board, *Connection Science*

## ADVISORY BOARDS

- 1982 Executive Board, International Society for Ecological Psychology.  
 Elected to the first Board of Directors  
 1995- Foundation for Biomusicology, Stockholm, Sweden and Florence, Italy  
 2003 - Scientific Advisory Board, Plexus Institute  
 1997- World Council, The Einstein Institutes  
 2009- Advisory Board, Intelligent Systems Research Institute, University of Ulster  
 2016-2018 Member of the Global Future Council on Neurotechnologies and Brain Science for the  
 World Economic Forum

## SAMPLES OF SERVICE

Regular reviews for funding agencies around the world, including The Wellcome Trust (UK), The Riken Brain Institute (Professorial Tenure Committee), Japan, NSF, MRC (Canada), Australian Medical Research Council, Templeton Foundation, Israel Research Foundation, Netherlands Organisation for Scientific Research

Since 1987, organized regular satellite meetings to the Society for Neuroscience, sponsored by the National Institutes of Health (and occasionally the Office of Naval Research and the National Science Foundation), dealing with various topics surrounding neurobehavioral dynamical systems, including Dynamical Neuroscience I (1991) to XX (New Orleans, 2012).

Inaugural Review Panel, Theoretical/Mathematical /Computational Neuroscience, NIMH, 1989-1990

Special Emphasis Review Panel, NIH, *Neuroinformatics/Human Brain Project*, Washington, D.C.

Consultant, NIMH, *New Directions for Neuroscience: The Next 10 Years*. Washington, D.C., 1995.

Advisory Board, *Restructuring NIH Peer Review Process and Study Sections in Cognitive and Behavioral Neuroscience*, Washington, DC 1997

Invited Speaker, *Future Career Opportunities in Neuroscience: Computational Neuroscience*. Special meeting for NIH Predoctoral Fellows. Washington, D.C., 1999.

NIMH/US delegation to inaugurate the National Brain Research Institute of India, New Delhi, 1999

Invited Speaker, NIH Training Director's meeting for recruitment of minority students in the Neurosciences: *Computational Neuroscience: The brain as a complex dynamical system*, Washington, D.C., 2000

Member, Review Panel for Sylvio O.Conte Centers for Neuroscience Research, NIH/NIMH, 2005  
Member, Review Panel, NIH/NINDS Fellowship Program, 2005  
Member, Review Panel, K99/R00 NIH Pathway to Independence Awards, 2012  
NSF Reviewer, International Science Collaboration (ORA) Program, 2013.  
Member (ex officio) NIMH Board of Scientific Counselors, June, 2014.  
Member, Special Emphasis Panel, BRAIN Initiative, NIH/NINDS, July, 2014.  
Member of the Global Future Council on Neurotechnologies and Brain Science for the World  
Economic Forum (2016-2018)

## **SELECTED INVITED LECTURES**

In the U.S.: *Brandeis University, Brown University, Rockefeller University, Harvard University, MIT, Yale University, Columbia University, University of Pennsylvania, Duke University, University of Miami, University of Florida, Emory University, University of Chicago, University of Illinois, University of Minnesota, University of Wisconsin, Madison, Indiana University, University of Colorado, Penn State University, Ohio State University, University of Texas, Austin, USC, UC San Diego, UCLA, University of Oregon, Rutgers University, etc.*

In South America: *Sao Paulo, Brazil, UFMG, Belo Horizonte, Ouro Preto*

In Canada: *McGill University, University of Montreal, York University, Laval, Waterloo, Western Ontario, Calgary, Simon Fraser, U. British Columbia, etc.*

In the U.K. and Ireland: *Oxford, Cambridge, Trinity College Dublin, Queens University Belfast, University of Ulster, University of Sheffield, NUI Galway, UCD, etc.*

In Australia and New Zealand: *Universities of Queensland, Melbourne, Adelaide, Sydney, Western Australia (Perth), University of Otago (Dunedin)*

In Europe: Finland (*Helsinki*); Germany (*Bielefeld, Heidelberg, Stuttgart, Berlin, Potsdam, Munich, Leipzig, Schloss Elman*); France (*Marseilles, Lyons, Arc et Senanque, Toulouse, Paris, Nice, Montpellier*); Italy (*Bologna, Trieste, Milano, Perugia, Trento, Elba, Sicily*); Portugal (*Sintra, Lisbon*); Spain (*Barcelona*); Sweden (*Royal Swedish Academy of Sciences; Foundation for Biomusicology, Sigtuna, etc.*) Switzerland (*Maccolin, Ascona*); The Netherlands (*Free University of Amsterdam, Royal Dutch Academy of Science; Technical University Delft*); Belgium (*Free University of Brussels; KULeuven*)

In Russia: *Moscow (Academy of Sciences), Suzdal*

In Japan: *University of Tokyo; ATR Kyoto.*

In India: *The National Brain Research Institute, New Delhi*

In China and Taiwan: *Chinese University of Hong Kong, National University of Taiwan*

## **SELECTED KEYNOTE ADDRESSES**

International Neuropsychology Symposium, Oxford, England, "Toward a theory of apractic syndromes" (1978).

NATO Advanced Study Institute: "Coordinative Structures as Dissipative Structures: Theory and Experiment", Abbaye de Senanque, France (1979)

International Conference on Attention and Performance, "Contrasting Perspectives on Order and Regulation in Movement", Jesus College, Cambridge (1980)

Nonlinearities in Brain Function, Kroc Foundation, Santa Barbara, USA (1982)

Complex Systems: Operational Approaches in Neurobiology, Physics and Computers, Schloss Elmau,

Germany (1984)

VII Commonwealth Games International Conference, Brisbane, Australia (1982)

Physics of Complexity, International Center for Theoretical Physics, Trieste, Italy (1986)

American Society of Biomechanics (1987)

51st Meeting of the German and British Physical Societies, Berlin, Germany (1987)

Centennial Symposium, Information creation in biological complex systems, University of Tokyo, Tokyo, Japan (1989)

Kenwood-Smith Lectures, University of North Carolina, Greensboro (1989)

Sigma Xi Lecturer (1990)

Solvay Foundation Symposium, Self-organization, emergent properties and learning, University of Texas, Austin (1990)

W. J. Bryan Lectures in Cognitive Science, Indiana University (1991)

IV<sup>th</sup> Waddington Memorial Conference, Significance and Form in Nature and Art, Spello-Perugia, Italy (1993)

25<sup>th</sup> Anniversary Symposium, Nonlinear Systems in Medicine and Biology, Purdue University (1994)

Man, Mind, and Music, Milano, Italy (1994)

Sports, Dance, Movement, and the Brain, Art Institute of Chicago (1995)

Gordon Conference on Multisegmental Motor Control: Neural, Behavioral, and Biomechanical Approaches, New Hampshire (1995)

International Conference on Intentional and Perceptual Dynamics, Amsterdam (1995)

The Fourth International Conference on Simulation of Adaptive Behavior, Cape Cod, MA (1996)

Sir Runrun Shaw Lectures, Chinese University of Hong Kong (1996)

Developmental Science and the Holistic Approach, Wiks Castle and the Nobel Institute Stockholm (1997)

Smithsonian Institution Lecture, Washington, D.C., “How the brain changes its mind” (1999)

Distinguished Lecture Series (5), Guarantors of *Brain*, London, England, “The self-organizing coordination dynamics of brain and behavior” (1999)

Plenary talk, NIH delegation to inaugurate the National Brain Research Institute of India, Delhi, October (1999; Gandhi’s birthday).

Fondazione Carlo Erba meeting on “The Emergence of Mind” Milano, Italy, April (2000)

Keynote Speaker, “Great Unsolved Problems in Biology”. Society for Experimental Biology, Cambridge, England, August (2000)

Distinguished Lecture Series (3) on Coordination Dynamics at The International School for Computable Economics, October (2000), Trento, Italy.

Herbstakademie on “Self- Organization of Cognition and applications to psychology”, Nov. (2000), Monte Verita, Switzerland. “Cognitive Coordination Dynamics”

Opening address, “Directed self-organization”, International Conference on Coordination Dynamics 2002, Delray Beach, May, 9-12, 2002.

Keynote Speaker, International Conference on “Uncertainty and Surprise”, Ilya Prigogine Center, University of Texas, Austin, April, 2003

Opening address, Cognitive Science in the 21<sup>st</sup> Century, Sao Paulo, Brazil, April, 2003.

Invited Speaker, Royal Dutch Academy of Science meeting on “Binding and its Breakdown”, Amsterdam, The Netherlands, September, 2003.

Distinguished Lecturer, “New vistas for the plasticity of brain” National Yang-Ming University, Taiwan, February, 2004

Jane Goodall Distinguished Scientist Lecture, CREST, Portland, Oregon, March, 2004  
Presidential (Human Kinetics) Lecture, NASPSPA, Vancouver, BC, June, 2004.

Plenary Speaker, Symposium on “Dynamic Approaches to Consciousness”, Antwerp, Belgium,  
June, 2004

FJ McGuigan Prize Lecture for Understanding the Mind, APA Convention, Washington, DC,  
August, 2005

A S Iberall Distinguished Lecture on Life and the Sciences of Complexity, University of  
Connecticut, December 2, 2005

Keynote speaker, International meeting on Cognitive Neuroscience and Motor Control, Dunedin,  
New Zealand, 7-9 December, 2005

Keynote address, Inaugural Meeting of EuCognition, A European Union research programme to  
develop Artificial Cognitive Systems, Nice, France, Feb., 16, 2006.

Conference Exceptionnelle du Pr. J.A.Scott Kelso, «Coordinating Brains » Dr Honoris Causa de  
l’Universite Paul Sabatier, Oct., 27, 2006.

Keynote address, IBM Almaden Institute Symposium on “Navigating Complexity”, San Jose,  
California, April, 10-11, 2007.

Invited speaker, Templeton Foundation Symposium on “Top down causation and volition”,  
Yosemite, California, April 19-21, 2007.

Opening address, International Symposium on “Brain-Mind in Probabilistic Hyperspace” Istanbul,  
Turkey, October 19-21, 2007.

Inaugural Geraldine Pellicchia Memorial Lecture on Coordination and Cognition, University of  
Connecticut, Storrs, October 26, 2007.

Invited Speaker, 8<sup>th</sup> Olympiad of the Mind Symposium, “Brain Research: Improving Global  
Harmony”, National Academies of Science, Washington, DC, November, 14-16, 2007.

Invited Speaker, Parmenides Foundation “Dynamics in and of attractor landscapes”, Elba, May 21-  
23, 2008.

Keynote Speaker, Delft School of Design “Trans\_Thinking the City: Architecture in Mind, Delft,  
Holland, October 31-Nov 1, 2008.

Pierre de Fermat Lecture, “A brief history of coordination”. Symposium on ‘Brain, Behavior and  
Beyond’ held in honor of J.A. Scott Kelso, Pierre de Fermat Laureate, University of  
Toulouse, April, 24, 2009.

B.F. Skinner Lecture, “The complementary nature of coordination dynamics”, Advanced  
Behavioral Analysis International, Phoenix, Arizona, May, 2009.

Invited Lecture, Society for Psychology and Philosophy, “Mechanisms and principles of adaptive  
change” Bloomington, Indiana, June, 2009

Keynote Speaker, International Workshop on Rhythmicity and Motor Control, “Coordination  
dynamics of rhythmic behavior” Sheffield, England, July1-4, 2009.

Invited speaker, Computer Science Research Institute Workshop, University of Ulster “Challenges  
for Computational Neuroscience: How to handle complexity”, Belfast, N. Ireland, July  
7-8, 2009.

Invited address, 7th International Congress on Progress in Motor Control, “Control and  
Coordination Dynamics”, Marseille, France, July 22-25, 2009.

Invited participant, Ernst Strüngmann Forum, “Dynamic Coordination in the Brain: From  
Neurons to Mind”, Frankfurt am Main, Germany, August 16-21, 2009.

Invited response to Dr Bert Sakmann, International Conference on Cognitive Robotics, University

of Ulster, L'Derry, N. Ireland, September, 2009.

Invited address “Coordination, Complementarity and Understanding” NSF Meeting on Neurocognitive Networks, Boca Raton, Fla, Jan 28-29, 2010

Keynote speaker, “Coordination, Chimeras and Complementarity”, International Conference on Brain Coordination Dynamics, March 1-5, 2010.

Keynote Speaker, Nour Foundation Symposium on “Shifting Realities”, New York Academy of Sciences, May 12, 2010

Invited Lecture Series (6) “The Science of Coordination: Coordination Dynamics” Technical University of Lisbon, June 1-2, 2010

Keynote Speaker, 21<sup>st</sup> International Conference on Artificial Intelligence and Cognitive Sciences (AICS 2010), Aug 30-Sept 1, 2010

Invited Speaker, Opportunities and Challenges in Social Neuroscience, Utrecht, The Netherlands, March 21-23, 2011

Grande Conferencia, “Coordination and The Complementary Nature”, Programa Cathedra, UFMG, Brazil, June 27, 2011.

Keynote Speaker “Music, Mind and Movement”, Belo Horizonte, Brazil, July 1, 2011.

Invited speaker, International Conference on Perception and Action XVI, “Some consequences of bidirectional coupling between humans, machines and nervous systems. Ouro Preto, Brazil, July 9, 2011

Keynote Speaker, International Conference of the European SKILLS project, Montpellier, France, Dec 15-16, 2011 “How humans learn new skills”.

Opening address, International Conference on Rethinking Meaning, “The Four Ms: Matter, Meaning, Movement and Myth”, University of Bologna, Italy, April 12-13, 2012.

Invited Speaker, NIH Conference on Criticality in Neural Systems, "Criticality and coordination in people and brains", Natcher Auditorium, April 30-May, 1, 2012.

Keynote Speaker, European Cooperation in Science and Technology Meeting on The Physics of Competition and Conflict, “Coordination, Conflict and Complementarity”, Aras Moyola, Galway, Ireland, July 11-14, 2012.

Co-Organizer and Invited Speaker, NIMH sponsored Dynamical Neuroscience XX, "The neural choreography of social interaction: How people and brains couple". New Orleans, October 11-12, 2012

Invited participant, Round Table on "Life and Movement", New Helix Center, New York City, October 26, 2012.

Invited Speaker, Tribute to the work of Maxine Sheets-Johnstone, SPEP, University of Rochester, November, 2-4, 2012.

Invited Seminar, NINDS Human Motor Control Section “The Neural Choreography of Behavior: Multiscale Coordination Dynamics”, November, 30, 2012.

Keynote Speaker, Intelligent Systems Research Summit, "Brain breakthroughs: From cells to society", Derry~Londonderry, N. Ireland, June 11-12, 2013.

Plenary Speaker, 4th International Conference on Cognitive Neurodynamics, "Bidirectional coupling between humans, machines and nervous systems", Sigtuna, Sweden, June, 23-27, 2013.

Plenary Speaker, 18th European College of Sports Science, "The neural choreography of coordinated behavior", Barcelona, Spain, June 26-29, 2013.

Keynote Speaker, International Conference on Complexity, Cognition, Urban Planning and Design,



"Cities as Coordinative Structures", Delft, Holland, 10-12 October, 2013.

Invited Speaker, International Conference on Diversity in Macroeconomics. Economic & Social Research Council (UK), Colchester, England, 24-25 Feb., 2014.

Invited Colloquium, Cognitive Science Program, University of Connecticut, "Coordinative structures, criticality and Crick's conjecture", April 3-4, 2014.

Invited Speaker, International Conference on Social Science, "The neural choreography of social coordination", Honolulu, Hawaii, May 28-31, 2014.

Invited Speaker, 2014 IEEE International Conference on Systems, Man & Cybernetics, "Coordination Dynamics: Bidirectional coupling between humans, machines and brains". San Diego, CA, Oct 5-8, 2014

Keynote Speaker, 18<sup>th</sup> Herbstakademie on The Circularity of Mind and Body, "The dynamical origins of conscious agency", Heidelberg, Germany, March 26-28, 2015.

Invited Howard Hughes Medical Institute (HHMI) Lecture "Coordinated movement: Making the familiar strange", The Claremont Colleges, June, 17-18, 2015.

Keynote Address, Society for Complex Systems in Cognitive Science, "From finger wiggling to mobile jiggling: Self Organizing Self", Pasadena, California, July 21, 2015

Keynote Address, 25<sup>th</sup> Anniversary of Society for Chaos Theory and Life Sciences, "Night thoughts of a dynamicist", Gainesville, Fla, July 29-31<sup>st</sup>, 2015

Invited Seminar, Intelligent Systems Research Centre, "On the origins of agency", Ulster University, Magee Campus, Derry, N.Ireland, September 29<sup>th</sup>, 2015.

Invited Visiting Scientist Lectures, The Weizmann Institute of Science, Rehovot, Israel, Contemporary Systems Biology Group, "The Coordination Dynamics of Moving Bodies" and "The Origins of Agency", November 5<sup>th</sup>-11<sup>th</sup>, 2015.

Invited Lecture "On the self-organizing origins of agency", Washington University, St Louis, December 2nd, 2015.

Invited Lecture, "Self-organizing self", The Cognitive & Brain Sciences Institute, UC Berkeley, April, 29th, 2016.

Keynote speaker, "On the self-organizing origins of agency", Rapaport-Klein Study Group, Austen Riggs Center, Stockbridge, MA, June 16th-19th, 2016

Invited Speaker, "Bidirectional coupling of bodies, brains, babies and machines", Ettore Majorana Foundation Meeting on Dynamical Coupling: From brain-to-brain to social interaction, Erice, Sicily, Sept 7-13, 2016.

Keynote Speaker, " Self-Organizing Coordination Dynamics of Bodies, Brains, Babies and Machines", Nebraska Research & Innovation Conference on Biomechanics, University of Nebraska, Omaha, Oct 12- 14, 2016.

## PUBLICATIONS<sup>1</sup>

2016/in press

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<sup>1</sup> Excluding Conference Abstracts

- Balagué, N., Torrents, C., Hristovski, R., & Kelso, J.A.S. (2016). Sport science integration: An evolutionary synthesis. *European Journal of Sport Science*, DOI:10.1080/17461391.2016.1198422
- Benites, D., Tognoli, E., & Kelso, J. A. S. (in press). Dinâmicas de Coordenação e Metaestabilidade. In V. G. Haase & G. Gauer (Eds.), *Elementos de Psicologia Cognitiva*. Porto Alegre: ARTMED.
- Bressler, S.L., & Kelso, J.A.S. (2016) Coordination Dynamics in Cognitive Neuroscience. *Front. Neurosci.*, 15 September 2016 | <http://dx.doi.org/10.3389/fnins.2016.00397>
- Dumas, G., Lefebvre, A., Zhang, M., Tognoli, E., & Kelso, J.A.S. (in press) The human dynamic clamp: a probe for social coordination dynamics. In Mueller, S., et al (Eds) *Complexity and Synergetics*, Springer
- Fuchs, A., & Kelso, J.A.S. (in press) Coordination Dynamics and Synergetics: From finger movements to brain patterns and ballet dancing. In Mueller, S., et al (Eds) *Complexity and Synergetics*, Springer
- Kelso, J.A.S. (2016). On the self-organizing origins of agency. *Trends in Cognitive Sciences*, 20 (7), 490-499 <http://dx.doi.org/10.1016/j.tics.2016.04.004>
- Kelso, J.A.S. & Fuchs, A. (2016). The coordination dynamics of mobile conjugate reinforcement. *Biological Cybernetics*, 110 (1), 41-53. DOI 10.1007/s00422-015-0676-0
- Kelso, J.A.S., Stolk, E., & Portugali, J. (2016) Self-organization and urban design as a complementary pair. In Portugali, J. & Stolk, E., (Eds.) *Complexity, Cognition, Urban Planning and Design*, Springer, Heidelberg.
- Nordham, C.A., & Kelso, J.A.S. (2016) The nature of interpersonal coordination. In Passos, P., Davids, K., Ji, C.J. (Eds). *Interpersonal Coordination and Performance in Social Systems*. Taylor & Francis/Routledge, pp. 32-52.
- Nordham, C.A., Tognoli, E., Fuchs, A., & Kelso, J.A.S. (submitted) How interpersonal coordination affects individual behavior (and vice-versa). *Ecological Psychology*
- Tognoli, E., Dumas, G., & Kelso, J.A.S.(in press) A roadmap to computational social neuroscience. *Cognitive Neurodynamics*
- Tognoli, E., Benites, D., & Kelso, J.A.S. (submitted) A blueprint for the study of the brain's spatiotemporal patterns. *Proceedings of IEEE*.
- Zhang, M., Dumas, G., Kelso, J.A.S., Tognoli, E. (2016) Enhanced emotional responses during social coordination with a Virtual Partner. *International Journal of Psychophysiology*, 104, 33-43.

## 2015

- Fuchs, A., Hotiu, A., Jantzen, K.J., Steinberg, F., & Kelso, J.A.S. (2015) Diffusion tensor imaging in mild traumatic brain injuries-Acute state and short-term recovery. *Medical Research*

- Kostrubiec, V., Dumas, G., De Guzman, G.C., Zanone, P.-G., & Kelso, J.A.S. (2015) The Virtual Teacher (VT) Paradigm: Learning new patterns of interpersonal coordination using the Human Dynamic Clamp. *PLoS ONE* 10(11): e0142029. doi:10.1371/journal.pone.0142029
- Tognoli, E. & Kelso, J.A.S. (2015). The coordination dynamics of social neuromarkers. *Frontiers in Human Neuroscience*, 9, 563, <http://dx.doi.org/10.3389/fnhum.2015.00563>
- Zhang, M., Nordham, C.A., & Kelso, J.A.S. (2015). Deterministic versus probabilistic causality in the brain: to cut or not to cut. *Physics of Life Reviews*, 15, 136-138.

## 2014

- Correia, V., Passos, P., Araújo, D., Davids, K., Diniz, A., & Kelso, J.A.S. (2014) Coupling tendencies during exploratory behaviors of competing players in rugby union dyads. *European Journal of Sport Science*. Doi:10.1080/17461391.2014.915344
- Dodel, S., Tognoli, E., & Kelso, J.A.S. (2014) The geometry of behavioral and brain dynamics of team coordination. *Proceedings of HCI International, 2013, Springer*.
- Dumas, G., DeGuzman, G.C., Tognoli, E. & Kelso, J.A.S. (2014) The Human Dynamic Clamp as a paradigm for social interaction. *Proceedings of the National Academy of Sciences* <http://www.pnas.org/cgi/doi/10.1073/pnas.1407486111>
- Dumas, G., Kelso, J.A.S., & Nadel, J. (2014). Tackling the social cognition paradox through multi-scale approaches. *Frontiers in Cognitive Science* doi: 10.3389/fpsyg.2014.00882
- Jing, M., McGinnity, T.M., Coleman, S., Fuchs, A. & Kelso, J.A.S. (2014) Temporal changes of diffusion patterns in mild traumatic brain injury via group-based semi-blind source separation. *IEEE Journal of Biomedical and Health Informatics*, <http://dx.doi.org/10.1109/JBHI.2014.2352119>
- Kelso, J.A.S., Tognoli, E., & Dumas, G. (2014). Coordination Dynamics: Bidirectional Coupling between humans, machines and brains. *IEEE International Conference on Systems, Man, and Cybernetics*, 978-1-4799-3840-7/14/\$31.00 ©2014 IEEE, 2269-2272.
- Kelso, J.A.S. (2014) The dynamic brain in action: Coordinative structures, criticality and coordination dynamics. In D. Plenz & E. Niebur (Eds.) *Criticality in Neural Systems*, John Wiley & Sons, Mannheim. Pp 67-106.
- Kelso, J.A.S. (2014) Coordination dynamics of cognition. In K. Davids, R. Hristovski, D. Araújo, N. Balague Serre, C. Button & P. Passos (Eds.) *Complex Systems in Sport*.
- Kelso, J.A.S. (2014) Invited Article “Coordination”. In R.C. Eklund & G. Tenenbaum (Eds.) *Encyclopedia of Sport and Exercise Science*, Vol.1, 174-176.
- Kelso, J.A.S. (2014). Invited Article “Coordination Dynamics”. In R.A. Meyers (Ed.) *Encyclopedia of Complexity and System Science*, Springer: Heidelberg. Updated Version of Kelso (2009).
- Kostrubiec, V. & Kelso, J.A.S. (2014). Incorporating Coordination Dynamics into an evolutionarily

grounded science of intentional change. *Behavioral & Brain Sciences*, 37, 395-460.

Tognoli, E. & Kelso, J.A.S. (2014a). The metastable brain. *Neuron*, 81, 35-48.

Tognoli, E. & Kelso, J.A.S. (2014b). Enlarging the scope: Grasping brain complexity. *Frontiers in Systems Neuroscience*, 8, 122. doi: 10.3389/fnsys.2014.00122

## 2013

Kelso, J.A.S. & Tognoli, E. (in preparation) Spatiotemporal metastability: Design for a brain (see Tognoli & Kelso, 2014a).

Kelso, J.A.S., Dumas, G., & Tognoli, E. (2013) Outline of a general theory of behavior and brain coordination. *Neural Networks*, 37, 120-131. (25<sup>th</sup> Commemorative Issue)

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