ECCS'11 - European Conference on Complex Systems 2011

Vienna , September 12-16, 2011

As one of the most important annual events in Complex Systems Science, the conference aims to provide a broad forum for the diverse communities engaged in Complex Systems research, ranging from the Life Sciences to Physics, from Computer Science to Social Science, from Mathematics to Origin of Life, and from Networks to Policy Implications.

The ECCS'11 will feature a fine selection of inspiring keynote speakers, satellite conferences , awards
, and panel discussions on a wide variety of hot topics.

Keynote speakers

Madan Babu

University of Cambridge

Madan Babu is currently a Senior Investigator at the MRC Laboratory of Molecular Biology, Cambridge, UK and and a Fellow of Darwin College, University of Cambridge. His group aims to understand how regulation is achieved at multiple levels of complexity in cellular systems and how this influences evolution of organisms and their genome. www2.mrc-lmb.cam.ac.uk/.../m-m-babu

Robert Devaney

Boston University

Robert L. Devaney is Professor of Mathematics at Boston University. His main area of research is dynamical systems, primarily complex analytic dynamics. Since 1989 he has been director of the National Science Foundation's Dynamical Systems and Technology Project. The goal of this project is to show students and teachers how ideas from modern mathematics together with modern technology can be used effectively in the high school and college curriculum. math.bu.edu/people/bob

Murray Gell-Mann

Santa Fe Institute

Murray Gell-Mann is an American physicist who received the 1969 Nobel Prize in physics for his work on the theory of elementary particles. In 1984 Gell-Mann co-founded the Santa Fe Institute, in the 1990s his interest turned to the theory of complex adaptive systems, which brings together topics such as historical linguistics, archeology, natural history, and other subjects connected with biological and cultural evolution and with learning. www.santafe.edu/~mgm

Ricardo Hausmann

Harvard University

Ricardo Hausmann is Director of the Center for International Development and Professor of the Practice of Economic Development at Harvard University. Previously, he served as the first Chief Economist of the Inter-American Development Bank, as Minister of Planning of Venezuela and as a member of the Board of the Central Bank of Venezuela. His research interests include issues of growth, macroeconomic stability, international finance. http://www.ricardohausmann.com/

Yoh Iwasa

Kyushu University

Yoh Iwasa is professor of Theoretical Biology at the Department of Biology, Kyushu University, and director of the Institute for Advanced Study, Kyushu University. Examples of his study areas include: pattern formation in cone mosaic of fish retina, leaf vein formation, circadian rhythm, somatic evolution of cancer, genomic imprinting, mate preference evolution, forest dynamics. bio-math10.biology.kyushu-u.ac.jp/~iwasa

Peter Schuster

University of Vienna

Peter Schuster is a theoretical chemist, known for his work on evolution of molecules and structure based RNA bioinformatics. He has contributed to the understanding of origin of life models. He is professor emeritus at Vienna University, was founding director of the Institute of Molecular Biotechnology in Jena and served previously as the President of the Austrian Academy of Sciences. He is external faculty professor at the Santa Fe Institute. www.tbi.univie.ac.at/~pks

Giulio Superti-Furga

Austrian Academy of Sciences

Giulio Superti-Furga is a molecular and systems biologist based in Vienna, Austria. He is the Scientific Director of CeMM, the Research Center for Molecular Medicine of the Austrian Academy of Sciences. His work has directly contributed to a systems-level understanding of pathogen infections in host cells and of the mechanism of action of specific drugs. He is an advocate for the adoption of systems biology approaches for medicine. www.cemm.oeaw.ac.at/index.php?id=29

Eörs Szathmáry

Collegium Budapest

Eörs Szathmáry is a Hungarian theoretical evolutionary biologist at Collegium Budapest and at the Department of Plant Taxonomy and Ecology of Eötvös Loránd University, Budapest. He is the co-author with John Maynard Smith of The Major Transitions in Evolution, a seminal work which continues to contribute to ongoing issues in evolutionary biology. www.colbud.hu/fellows/szathmary.shtml

Corina Tarnita

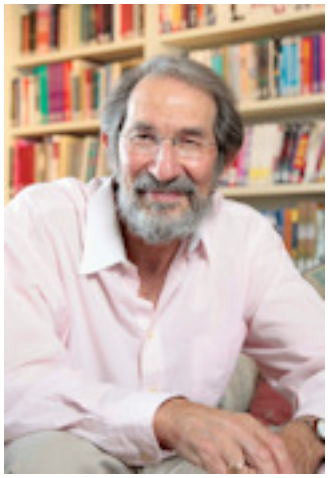
Harvard University

Corina Tarnita is a junior fellow in the Harvard Society of Fellows. She is part of the Program for Evolutionary Dynamics, Harvard University, directed by Martin Nowak. Her research interests include evolutionary dynamics (in particular, evolutionary game theory). math.harvard.edu/~corina

Constantino Tsallis

Brazilian Center for Physics Research

Constantino Tsallis is a physicist in the area of statistical mechanics, head of the Department of Theoretical Physics of the Brazilian Center for Physics Research, Rio de Janeiro, and also head of the National Institute of Science and Technology for Complex Systems of Brazil. He has worked in a variety of theoretical subjects; since two decades, he is focusing on the entropy and the foundations of statistical mechanics. http://www.santafe.edu/about/people/profile/Constantino%20Tsallis



Geoffrey West

Santa Fe Institute

Geoffrey West is Distinguished Professor and former President of the Santa Fe Institute. His interests are in fundamental questions in physics and biology, from elementary particles to the origins and principles underlying universal scaling laws in biology, including metabolism, growth, aging, cancer, and ecosystems. Recent work focused on a theory of cities, companies and global sustainability. He was selected for Time's list of "100 Most Influential People in the World" (2007). http://www.santafe.edu/about/people/profile/Geoffrey%20West

Invited speakers

Besides the keynote speakers above, the conference and its satellites will feature invited talks including the following experts.

Petra Ahrweiler	Tomaso Aste	Albert-László Barabási	Allain Barrat
Jean-Philippe Bouchaud	Damiano Brigo	Ed Bullmore	Guido Caldarelli
Frank Cunningham	Michel Dacorogna	Peter Davis	Tiziana Di Matteo
Moez Draief	Bruce Edmonds	Mauro Gallegati	Bei Gao
Nigel Gilbert	Bielenia Grajewska	Giulia Iori	Ozde Kalkan

János Kertész	Alan Kirman	Manuela Korber	Vito Latora
Renaud Lambiotte	Fabrizio Lillo	Pablo Lucas	Rosario N. Mantegna
Cecilia Mascolo	Luca Minghini	Gianluca Misuraca	Sylvie Occelli
Manfred Paier	Diane Payne	Dino Pedreschi	Luciano Pietronero
Jeremy Pitt	Andreas Pyka	Giovanni Rabino	Peter Richmond
Miguel Romance	Martin Rosvall	Jose Javier Alba Sanchez	Jari Saramäki
Michel Schilperoord	Benjamin Schrempf	Ferdinando Semboloni	William Shaw
Dave Snowden	Eugene H. Stanley	John Sutcliffe-Braithwaite	Stefan Thurner
Andromachi Tseloni	Alessandro Vespignani	Christopher Watts	Yi-Cheng Zhang*