

Topics and Format

The Conference is organized in the following three Areas to cover all the Topics of Statistical Physics:

Area A: Foundations and Theoretical aspects of classical, quantum and relativistic statistical physics and thermodynamics. Mathematical aspects and methods, formalism, rigorous results, exact solutions, connections with the methods of high energy physics, string theory, mathematical statistics and information theory, information geometry, classical, quantum and relativistic transport theory, Boltzmann and Fokker-Planck kinetics, nonlinear kinetics, dynamical systems, relaxation phenomena, random systems, pattern formation, fractal systems, solitons, chaotic systems, strongly correlated electrons, soft quantum matter, mesoscopic quantum phenomena, fractional quantum Hall effect, low dimensional quantum field theory, quantum phase transitions, quantum information and entanglement, power laws, stochastic optimal control.

Area B: Applications to Physical Systems, quantum systems, soft condensed matter, liquid crystals, plasmas, fluids, surfaces and interfaces, disordered and glassy systems, percolation, spin glasses, structural glasses, jamming, critical phenomena and phase transitions, fluids and interfacial phenomena, molecular and ionic fluids, metastable liquids, hydrodynamic instabilities, turbulence, wetting processes, wetting surface effects, films, crystals, confined systems, surfaces and interfaces, chemical reactions, cold atoms, etc.

Area C: Applications to non-Physical Systems, interdisciplinary applications of statistical physics, networks and graphs, applied networks, biophysics, geophysics, environment, climate and earth models, seismology, linguistics, econophysics, social systems, traffic flow, algorithmic problems, complex systems, nonlinear time-series analysis, novel data analysis tools, extreme events, tipping points, prediction, classification, etc.

The Conference is organized in Symposia/Sections dealing with general aspects and applications of statistical physics.

Special sessions: Some special sessions within the thematic Area A will cluster talks dedicated to the following theoretical topics: **A1** Stochastic Processes in Complex Environment; **A2** Kinetic Theory and its applications; **A3** Connections of Statistical Mechanics with Information Geometry.

Workshops: The following thematic workshops on **Gamma Distributions and Statistical Mechanics**, **Statistical Physics for Quantum Economy**, **Quantum Matter**, **Statistical Physics of Environment, Climate and Ecosystems**, **A**, complexity and self-organization in biology and physiology, **E**, sociophysics and Econophysics will cluster talks dedicated to special applications of statistical physics in physical and non-physical systems and will be organized as parallel events.

Poster Sessions: The Conference will also include some poster sessions.

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EPS-SNP, European Physical Society Statistical and Nonlinear Physics Division

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Kotik G. (University of Science and Technology, Beijing, China)
Kuznetsov N. (Institute for Theoretical Applied Sciences, Moscow, Russia)
Lazer M. (Katholieke Universiteit Leuven, Belgium)
Lebowitz J.L. (Rutgers-The State University of New Jersey, US)
Lee M.H. (University of Guelph, US)
Leyva-Velasco C. (Universidad Autónoma de México, México)
Livadiotis G. (Southwest Research Institute, San Antonio, US)
Lusca M. (University of Silesia, Poland)
Lutsko J.F. (University Libre de Bruxelles, Belgium)
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Nowak M. (Jagiellonian University, Poland)
Ohara A. (University of Tokyo, Japan)
Ortiz R. (Politecnico di Torino, Italy)
Ortiz R. (Institut de Physique Théorique, CEA-Saclay, France)
Pagonabarraga I. (Universidad de Barcelona, Spain)
Paltanazas G. (University of Groningen, Netherlands)
Paradis P. (IFT-UB, Rio de Janeiro, Brazil)
Pincus F. (USC, Santa Barbara, USA)
Polkovnikov A. (Boston University, USA)
Prellberg T. (Potsdam State University, Potsdam, UK)
Ragusa A. (University of Catania, Italy)
Riort F. (University of Barcelona, Spain)
Rittenberg W. (Bonn University, Germany)
Rossi P. (University of Pisa, Italy)
Saghai T. (University of Tokyo, Japan)
San Miguel M. (ISC-CNR, Istituto Nazionale de Matematica, Spain)
Sakai A. (ISC-CNR, University of Padua, Italy)
Shikano Y. (Institute for Materials Science, Osaka, Japan)
Shigeta B. (The University of British Columbia, Vancouver, Canada)
Sommer D. (ETH Zurich, Switzerland)
Spitka V. (University of Science Academy of Sciences, Czech Republic)
Suzuki H. (Tohoku University, Japan)
Szynskowski B. (Institute of Polymer Science, USA)
Tadic B. (Jozef Stefan Institute, Ljubljana, Slovenia)
Talbot J. (Université Pierre et Marie Curie, Paris, France)
Tejo de Almeida M. (Universidade de Lisboa, Portugal)
Toroczek Z. (University of Notre Dame, Notre Dame, USA)
Tsonis G.P. (University of Crete, Greece)
Valenti D. (University of Palermo, Italy)
Van R. (MTA Wigner Research Center for Physics, Hungary)
Wade T. (Liberal University, Japan)
Wang Q.A. (Unicel-Hell, France)
Wio H.S. (University of Cantabria, Santander, Spain)
Włodarczyk Z. (University of Kielce, Poland)
Yeomans J. (Oxford University, UK)
Yoon P. (University of Maryland College Park, USA)
Yuste S.B. (University of Zaragoza, Spain)
Zagorin A. (Loughborough University, UK)
Zotos K. (University of Crete, Greece)

Invited Speakers

Barkley D. (University of Warwick, UK)
Bashir F.M. (COMSATS Institute of Information Technology, Lahore, Pakistan)
Beck C. (Queen Mary, University of London, UK)
Boettcher S. (Emory University, US)
Cecot P. (University College London, UK)
Caldeirali G. (IMT School for Advanced Studies, Italy)
Carollo A. (University of Palermo, Italy)
Caruso F. (University of Warwick, UK)
Chapman S. (University of Warwick, UK)
Consolini G. (National Institute of Astrophysics, Italy)
Cui X. (Chinese Academy of Sciences, China)
Dettmann C.P. (University of Bristol, UK)
Donev A. (New York University, US)
Du J. (Tsinghua University, China)
Dzifcakova E. (AU AVCH Ondrejov, Czech Republic)
Ejhed A. (Shant University, The Netherlands)
Fagot M. (École Normale Supérieure, France)
Field T.R. (McMaster University, Ontario, Canada)
Fleishman G. (New Jersey Inst. of Technology, US)
Gabrielli S. (IST-CNR, University of Sapienza, Italy)
Ganopol D.D. (University of Arizona, US)
Gill M. (University of Warwick, UK)
Gottwald G. (Academy of Athens, Greece)
Gudowski-Nowak E. (Jagiellonian University, Poland)
Hansen A. (Norwegian University of Science and Technology, Norway)
Hennin M. (The Institute of Statistical Mathematics, Teikyo University, Japan)
Hof A. (University of Science and Technology, Austria)
Hof A. (University of Science and Technology, Austria)
Imparato A. (University of Aarhus, Denmark)
Jensen H. (Imperial College London, UK)
Kastner M. (Steinbock University, South Africa)
Kondor I. (Eötvös University, Hungary)
Koussis S. (Boston University, US)
Korshakova I. (University of New Hampshire, US)
Lappigall J. (University of Applied Sciences, Bremen, Germany)
Lorenz L. (PADOVA-CNR, University of Turin, Italy)
Lillo P. (Scienze Normale Superiore, Italy)
Lorenz L. (PADOVA-CNR, University of Turin, Italy)
Lucca M. (University of Silesia, Poland)
Mata A. (University of Wrocław, Poland)
Mancini S. (University of Coimbra, Italy)
Mannville P. (École Polytechnique, France)
Mantegani N. (University of Palermo, Italy)
Marinari A. (University of Padua, Italy)
Marin-Vázquez M. (Universidad Complutense de Madrid, Spain)
Marzocchi M. (University of Bologna, Italy)
McGowan D.J. (University of Warwick, UK)
Mendes J.F. (University of Aveiro, Portugal)
Metzler R. (University of Potsdam, Germany)
Monasterio C. (Universidad Complutense de Madrid, Spain)
Mukamel D. (Weizmann Institute, Rehovot, Israel)
Naudts J. (University of Antwerp, Belgium)
Nowak M. (Jagiellonian University, Poland)
Ogatawa K. (Southwest Research Institute, US)
Olein A. (Ecole Polytechnique, France)
Pardoll P. (IST-CNR, University of Sapienza, Italy)
Patri G. (IST Foundation, Torino, Italy)
Petrus J. (Belgian Institute for Space-Aeronautics, Belgium)
Pietronero L. (University La Sapienza, Rome, Italy)
Pistone C. (Politecnico di Torino, Italy)
Pistone C. (Politecnico di Torino, Italy)
Politi M. (University of Turin, Italy)
Provata A. (Inst. Cent. Scientific Res. "Demokritos", Athens, Greece)
Ruffo S. (University College London, UK)
Saad D. (University of Aizu, Japan)
Saghai T. (University of Tokyo, Japan)
Salas C. (University of Granada, Spain)
Santini N. (University of Athens, Greece)
Shimizu A. (The University of Tokyo, Japan)
Sourlas N. (École Normale Supérieure, France)
Spagnolo B. (University of Palermo, Italy)
Spagnolo B. (University of Palermo, Italy)
Stefanini D. (London School of Economics, UK)
Summers D. (University of New South Wales, Australia)
Sung J. (Chung-Ang University, Korea)
Takayasu H. (Sony Computer Science Laboratories, Tokyo, Japan)
Takayasu M. (Tokyo Institute of Technology, Japan)
Tanaka M. (University of Tokyo, Japan)
Tassa P. (University College London, UK)
Tospeff F. (University of Copenhagen, Denmark)
Torral R. (Inst. de Física Interdisciplinaria y Sistemas Complejos, Spain)
Tuckerman L. (PIMM-EPSC-CNRS, France)
Vozz S. (Austrian Academy of Sciences, Austria)
Wang L. (Leibniz University, China)
Watkins N. (University of Warwick, UK)

EPS-SNP Meeting:

The summer board meeting of the European Physical Society - Statistical and Nonlinear Physics Division (EPS-SNP) will be held during the SigmaNP2017 Conference.