Invited speakers:

Andreas Amann (University College Cork, Ireland)
Dynamical Features and Bifurcations of Stochastic Limit Cycle Systems

Alexander Balanov (Loughborough University, UK)
Nonlinear Dynamics of Computation and Memory: Quantum Reservoirs and Recurrent Neural Networks

Christian Beck (Queen Mary University of London, UK)
Power grid stability: From the Kuramoto model with inertia and noise to realistic measurements

Jens Christian Claussen (University of Birmingham, UK)
Cyclic coevolutionary dynamics: from stochasticity to control

Natasa Djurdjevac Conrad (Zuse Institute Berlin, Germany)
Co-evolving Networks for Opinion and Social Dynamics in Agent-Based Models

Frederico Costa (Oncology Department, Hospital Sírio-Libanês, São Paulo, Brazil)
Willian Trevizan (AutEM Therapeutics, Hanover, NH, USA)
External synchronization of cellular rhythms by electromagnetic fields can selectively target cancer cells

Cornelia Denz (PTB National Metrology Institute Braunschweig, Germany)
Nonlinear networks: from electricity grids to sensor networks

Deniz Eroğlu (Imperial College London, UK)
Reconstructing Brain Network Dynamics: Predicting and Preventing Malfunctions

Ulrike Feudel (University of Oldenburg, Germany)
The constructive role of transient chaos in complex systems

Bernold Fiedler (FU Berlin, Germany)
Kuramoto-oscillators with all-to-all coupling: transients

Igor Franović (University of Belgrade, Serbia)
Coherence-incoherence patterns in nonlocally coupled excitable systems

Theo Geisel (MPI for Dynamics and Self-Organization, Göttingen, Germany)
TBA

Fakhteh Ghanbarnejad (SRH University of Applied Sciences, Leipzig, Germany)
Infectious Diseases and Mobility Reshape Stability in Three-Level Food Chains

Svetlana Gurevich (University of Münster, Germany
Multistable Kuramoto splay states and coherent pulse interactions in mode-locked semiconductor lasers

Plamen Ch. Ivanov (Keck Laboratory for Network Physiology, Boston University, USA)
The new field of Network Physiology: Building the Human Physiolome

Jun Jiang (Xi'an Jiaotong University, China)
Understanding global structure of nonlinear dynamical systems by approach of state space discretization and deep learning

Juergen Kurths (Potsdam Institute for Climate Impact Research, Germany)
Climate Tipping Points and Extreme Events: On their Formation and Forecasting

Aneta Koseska (MPI for Neurobiology of Behavior, Bonn, Germany)
Processing information with ghost scaffolds

Yuliya Kyrychko (University of Sussex, UK)
From Gut to Brain: Modelling Microbiota-Driven Neuroinflammation in Alzheimer's Disease

Wei Lin (Fudan University, Shanghai, China)
Recent advances in study of complex dynamical systems and AI

Rene Lozi (Université Cote d'Azur, Nice, France)
Peculiarities of the spatio-temporal dynamics of a Hénon–Lozi map network in the presence of Lévy noise

Cristina Masoller (Universitat Politecnica de Catalunya, Barcelona, Spain)
Synchronization transitions in networks of Hodgkin–Huxley neurons

Hildegard Meyer-Ortmanns (Constructor University, Bremen, Germany)
Switching dynamics in oscillatory systems from deterministic equations

Klaus Obermayer (TU Berlin, Germany)
Computational Models of Slow Sleep Oscillations

Ulrich Parlitz (MPI for Dynamics and Self-Organization, Göttingen, Germany)
Transient chaos and fibrillation in cardiac excitable media

Arkady Pikovsky (University of Potsdam, Germany)
Coherence properties of global modes in oscillatory networks

Astero Provata (National Center for Scientific Research "Demokritos", Athens, Greece)
TBA

Michael Rosenblum (University of Potsdam, Germany)
Second-order Kuramoto-Sakaguchi model: what can it explain?

Nadezhda Semenova (Saratov State University, Russia)
Analog neural networks. How noise can affect the performance.

Peter Tass (Stanford University, USA)
Vibrotactile Coordinated Reset Fingertip Stimulation for the Treatment of Parkinson's Disease

Marc Timme (TU Dresden, Germany)
Tipping to Failure? – Strongly Perturbed Nonlinear Network Dynamics

Alessandro Torcini (CY Cergy Paris Université, France)
The π-transition : a tipping point for the Kuramoto model with triadic interactions

Andreas Wacker (Lund University, Sweden)
Chaotic scenarios for ignition of quantum cascade lasers

Karoline Wiesner (University of Potsdam, Germany)
Modelling Dynamics of Political Regimes with help of Complexity Science

Dirk Witthaut (Forschungszentrum Jülich, Germany)
Synchronization and Multistability via Convex Optimization

Yong Xu (Northwestern Polytechnical University, Xi'an, China)
Stochastic-resonance and coherence-resonance chimeras in coupled neurons with α-stable Lévy noise

Jin Yan (WIAS Berlin, Germany)
Simplicity and Complexity of Coupled Map Lattices

Zhigang Zheng (Huaqiao University, Xiamen, China)
Swarming pattern formation in frustrated Vicsek systems