# Preliminary Program

## Sunday, 19th

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| 18:00 – 20.00 | *Registration* |
| 20:00 – | *Get together*<br>*Cafeteria, Max-Planck-Institute für Physik komplexer Systeme* |

## Monday, 20th

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| 08:50 – 09:00 | Opening address |
| 09:00 – 09:45 | Philip Pechukas (New York):<br>Physical and mathematical aspects of activated processes<br>with fluctuating barriers |
| 09:45 – 10:30 | Alexandre Drozdov (Sevilla)<br>Escape over a barrier of arbitrary shape:<br>Comparison of current theories with numerically exact results |
| 10:30 – 11:00 | *Coffee* |
| 11:00 – 11:45 | Martin Bier (Chicago)<br>What is adiabaticity - suggestions from a fluctuating barrier model |
| 11:45 – 12:30 | Peter Talkner (Villingen)<br>Adiabatic theory of seasonal processes |
| 12:30 – 14:30 | *Lunch* |
| 14:30 – 15:15 | Manuel Morillo Buzon (Sevilla)<br>Large fluctuations, optimal paths and<br>the prehistory distribution |
| 15:15 – 16:00 | Andrzej Fulinski (Krakow)<br>Ion transport through biological membranes<br>and barrier fluctuations |
| 16:00 – 16:30 | *Coffee* |
| 16:30 – 17:15 | Kestutis Pyragas (Vilnius)<br>Generalized synchronization of chaos |
| 18:30 – 20:00 | *Supper* |
| 20:00 – 22:00 | *Poster Session* |

# Preliminary Program

**Tuesday, 21st**

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|---|---|
| 09:00 – 09:45 | Jaques Prost (Paris)<br>to be announced |
| 09:45 – 10:30 | Tamas Viscek (Budapest)<br>Realistic ratchet models of biological motion |
| 10:30 – 11:00 | *Coffee* |
| 11:00 – 11:45 | Pascal Silberzan (Paris)<br>Experimental studies on ”force-free” motion :<br>from microscopic to macroscopic scales |
| 11:45 – 12:30 | Jerzy Luczka (Katowice)<br>Brownian transport controlled by thermal and<br>dichotomic sources of noise |
| 12:30 – 14:30 | *Lunch* |
| 14:30 – 15:15 | Ivar Zapata (Madrid)<br>Novel rectification schemes for macroscopic quantum devices |
| 15:15 – 16:00 | Dmitry Postnov (Saratov)<br>Synchronization-like phenomena in stochastic transport |
| 16:00 – 16:30 | *Coffee* |
| 16:30 – 17:15 | Günter Radons (Kiel)<br>Chaotic transport in the presence of disorder |
| 17:15 – 18:00 | Arkadi Pikovsky (Potsdam)<br>Coherence resonance in noise-driven systems |
| 19:00 – | *Conference Dinner*<br>*Sophienkeller, Taschenbergpalais* |

# Preliminary Program

**Wednesday, 22nd**

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|---|---|
| 09:00 – 09:45 | Dean Astumian (Chicago)<br>Kinetics and thermodynamics of Brownian motors and pumps |
| 09:45 – 10:30 | Juan Parrondo (Madrid)<br>Efficiency of Brownian motors |
| 10:30 – 11:00 | *Coffee* |
| 11:00 – 11:45 | Ken Sekimoto (Kyoto)<br>Stochastic energetics |
| 11:45 – 12:30 | Jan A. Freund (Berlin)<br>Optimization of discrete ratchets |
| 12:30 – 14:30 | *Lunch* |
| 14:30 – 15:15 | Fabio Marchesoni (Camerino)<br>Transport of elastic strings in solids |
| 15:15 – 16:00 | Peter Reimann (Augsburg)<br>Coupled Brownian motors with anomalous hysteresis and zero-bias negative conductance |
| 16:00 – 16:30 | *Coffee* |
| 16:30 – 17:15 | Seunghwan Kim (Pohang)<br>Coupled noisy neurons |
| 17:15 – 18:00 | Frank Schweitzer (Berlin)<br>Complex motion of Brownian particles with energy depots |
| 18:30 – | *Supper* |

# Preliminary Program

**Thursday, 23rd**

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|---|---|
| 09:00 – 09:45 | Peter Jung (Athens)<br>Noise enhanced spatiotemporal coherence in neurobiology and chemistry |
| 09:45 – 10:30 | Jose M. G. Vilar (Barcelona)<br>Ordering periodic spatial structures by noise |
| 10:30 – 11:00 | *Coffee* |
| 11:00 – 11:45 | Wokyung Sung (Pohang)<br>Coupled stochastic systems: Biological Examples |
| 11:45 – 12:30 | Jordi Garcia-Ojalvo (Barcelona)<br>Noise-induced phase separation |
| 12:30 – 12:40 | Closing Remarks |
| 12:40 – | *Lunch* |