**25th Marian Smoluchowski Symposium on Statistical Physics**
from **Sunday, 9 September 2012 (10:00)** to **Thursday, 13 September 2012 (15:30)**

: Sessions : Talks : Breaks

## Sunday, 9 September 2012

**AM**

| | |
|---|---|
| 10:00 | --- Conference Opening and Awarding of the Henryk Niewodniczański Prize --- |
| **10:45** | **Sunday Session** - Ewa Gudowska-Nowak (Jagiellonian University) (until 12:15) |
| 10:45 | Smoluchowski Symposia: Why are we here? - Paweł Góra (Jagiellonian University) |
| 11:30 | From passive to active Brownian Motion - Werner Ebeling (Humboldt University, Institute of Physics) |
| 12:15 | --- Coffee Break --- |
| **12:45** | **Sunday Session** - Lech Longa (until 15:00) |
| 12:45 | Facing the coming scientific and social challenges: The role of the NSP division of EPS - Anna Carbone (Politecnico di Torino) |
| 13:30 | Marian Smoluchowski on sources of randomness in physics and deterministic chaos - Marek Kuś (Center for Theoretical Physics PAS) |
| 14:15 | Electromagnetic waves interaction with various metallic nanomaterials - Michael Giersig (Freie University Berlin, Department Physics) |

**PM**

| | |
|---|---|
| 15:00 | --- Lunch --- |
| 19:00 | --- Get Together Party --- |

## Monday, 10 September 2012

**AM**

| | |
|---|---|
| **09:00** | **Monday Session** - Christian Van den Broeck (Hasselt University) (until 11:15) |
| 09:00 | Thermodynamics of information processing: A simple, solvable model of Maxwell's Demon - Chris Jarzynski (University of Maryland, College Park) |
| 09:50 | Maxwell's Demon and information thermodynamics - Masahito Ueda (Department of Physics, University of Tokyo) |
| 10:40 | Reversible thermodynamic processes with feedback - Jordan Horowitz (Universidad Complutense de Madrid) |
| 11:15 | --- Coffee Break --- |
| **11:35** | **Monday Session** - Lutz Schimansky-Geier (Instiute of Physics, Humboldt-University at Berlin, Germany) (until 13:00) |
| 11:35 | Stochastic thermodynamics: Engines and demons - Massimiliano Esposito (University of Luxembourg) |
| 12:25 | Anomalous thermodynamics at the micro-scale - Ralf Eichhorn (The Nordic Institute for Theoretical Physics) |

**PM**

| | |
|---|---|
| 13:00 | --- Lunch --- |
| **15:00** | **Monday Session** - Margarida Telo da Gama (Universidade de Lisboa) (until 16:40) |
| 15:00 | Recent progress in free energy recovery from irreversible pulling experiments - Felix Ritort (Universitat de Barcelona) |
| 15:50 | Information engines - Juan M.R. Parrondo (Universidad Complutense de Madrid) |
| 16:40 | --- Coffee Break --- |
| **17:00** | **Monday Session** - Igor Sokolov (until 18:40) |
| 17:00 | Momentum transfer in nonequilibrium steady states - Ken Sekimoto (Paris7 & ESPCI) |
| 17:50 | Fluctuation relations for open systems - Peter Hänggi (Universität Augsburg) |

## Tuesday, 11 September 2012

**AM**

| | |
|---|---|
| **09:00** | **Tuesday Session** - Peter Hänggi (UNIV AUGSBURG) (until 11:15) |
| 09:00 | Fluctuations, symmetries and energy sorting in driven systems - Jose Miguel Rubi (University of Barcelona) |
| 09:50 | On anomalous diffusion and the out of equilibrium response function in one-dimensional models - Angelo Vulpiani (Dipartimento di Fisica, Università degli Studi di Roma "Sapienza") |
| 10:40 | Overdamped motion in two-dimensional septate channels - Marcello Borromeo (Universita' di Perugia) |
| 11:15 | --- Coffee Break --- |
| **11:45** | **Tuesday Session** - Peter Talkner (Institut fuer Physik, Universitaet Augsburg, Germany) (until 13:25) (Main Aula) |
| 11:45 | Time-reversal symmetry relation for nonequilibrium flows ruled by the fluctuating Boltzmann equation - Pierre Gaspard (Université Libre de Bruxelles) |
| 12:35 | Define chaos in 1d from first principles - M Howard Lee (University of Georgia) |

**PM**

| | |
|---|---|
| 13:25 | --- Lunch --- |
| 14:45 | --- City Tour --- |
| 19:00 | --- Concert and Banquet --- |

## Wednesday, 12 September 2012

**AM**

| | |
|---|---|
| **09:00** | **Wednesday Session** - Karina Weron (Institute of Physics, Wrocław University of Technology) (until 11:15) |
| 09:00 | On the efficiency of (small) machines - Christian Van den Broeck (Hasselt University) |
| 09:50 | Quantum fluctuation theorems for different initial states - Peter Talkner (Institut fuer Physik, Universitaet Augsburg, Germany) |
| 10:40 | Brownian motions in systems with variable temperature - Andrzej Fuliński (Jagiellonian University) |
| 11:15 | --- Coffee Break --- |
| **11:45** | **Wednesday Session** - Juan Parrondo (until 13:40) (Main Aula) |
| 11:45 | Distribution of dissipated energy in electron tunneling - Jukka Pekola (Aalto University) |
| 12:35 | Ergodicity and mixing of anomalous diffusion processes - Marcin Magdziarz (Wroclaw University of Technology) |
| 13:10 | Noise induced phase transitions and coupled Brownian motors: non standard hysteretic cycles - Horacio S. Wio (Instituto de Fisica de Cantabria) |

**PM**

| | |
|---|---|
| 13:40 | --- Lunch --- |
| **15:30** | **Wednesday Session** - Jose Miguel Rubi (until 17:10) (Main Aula) |
| 15:30 | Models and tests for anomalous diffusion in crowded environments - Igor Sokolov (Instiute of Physics, Humboldt-University at Berlin, Germany) |
| 16:20 | Synchronization of globally coupled two-state stochastic oscillators - Katja Lindenberg (University of California San Diego) |
| **18:00** | **Poster Session** - Zbigniew Grzywna (Silesian University of Technology) Paweł Góra (until 21:00) () |

## Thursday, 13 September 2012

**AM**

| | |
|---|---|
| **09:30** | **Thursday Session** - Jerzy Łuczka (Univesrity of Silesia) (until 11:10) |
| 09:30 | Quantum entanglement - a statistical approach - Karol Życzkowski (Uniwersytet Jagielloński) |
| 10:20 | Power law behavior in the ion traffic through a lipid bilayer at the melting transition - Martin Bier (East Carolina University) |
| 11:10 | --- Coffee Break --- |
| **11:40** | **Thursday Session** - Robert Holyst (Institute of Physical Chemistry PAS) (until 13:05) |
| 11:40 | Efficient electron transfer via heterogeneous superexchange coupling in photosynthetic bacteria - Sighart F. Fischer (Technical University Munich) |
| 12:15 | Synchonization of stochastic oscillators - Lutz Schimansky-Geier (Instiute of Physics, Humboldt-University at Berlin, Germany) |

**PM**

| | |
|---|---|
| 13:05 | --- Lunch --- |