



# Ratchets in point-particle systems and in extended models: Mechanisms, control and applications



**Ratchets-2007: Casa de Carmona, Carmona, (Sevilla) February 5-7, 2007**



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**The main aim** of this Meeting is to convene the leading experts in the field to discuss and revise, in an appropriate atmosphere, the state of the art and the most recent advances in the field of non-linear systems, and more concretely of the transport phenomena of ratchet type.

**The main topics** to be considered will be: Ratchet effect in superconductors, optical lattices, molecular motors. Control mechanism of ratchets, the corresponding biophysics and biomathematics of molecular motors, application of the ratchet effect in nano and biotechnology and optical lattices

## Invited speakers

- Chris van den Broeck (Universiteit Hasselt, Belgium)
- Jesus Casado-Pascual (Universidad de Sevilla, Spain)
- Serguey Denisov (Universitat Augsburg, Germany)
- Amar H. Flood (University of Indiana, UK)
- David Leigh (University of Edinburgh, UK)
- Heiner Linke (University of Oregon, USA)
- Fabio Marchesoni (Universita di Perugia, Italy)
- José L. Mateos (Universidad Nacional Autónoma de México, México)
- Franz Mertens (University of Bayreuth, Germany)
- Manuel Morillo (Universidad de Sevilla, Spain)
- Juan M. R. Parrondo (Universidad Complutense de Madrid, Spain)
- Peter Reimann (Universität Bielefeld, Germany)
- Ferruccio Renzoni (University College London, UK)
- Mario Salerno (University of Salerno, Italy)
- Lutz Schimansky-Geier (Humboldt - Universität zu Berlin, Germany)
- José Luis Vicent (Universidad Complutense de Madrid, Spain)



**Organizing Committee:** Renato Álvarez-Nodarse, Niurka R. Quintero (Univ. de Sevilla, Spain), and Angel Sánchez (Univ. Carlos III, Spain)

**Scientific Committee:** Angel Sánchez (Univ. Carlos III, Spain), Peter Hanggi (Univ. Augsburg, Germany) Heiner Linke (Univ. of Oregon, USA), Juan M. R. Parrondo (Univ. Complutense de Madrid, Spain), Jacques Prost (Institut Curie, France), Niurka R. Quintero (Univ. de Sevilla, Spain), José M. Sancho (Univ. de Barcelona, Spain)

**For more information visit the WWW:** <http://euler.us.es/~ratchets/>