



# 7th International Conference on Unsolved Problems on Noise

Barcelona, July 13-17 2015

## BARCELONA 2015

The 7th International Conference on Unsolved Problems on Noise will be held in Barcelona, Spain, from July 13 through July 17, 2015. The conference will take place in the Casa de Convalescència of the Hospital de Sant Pau, conveniently located close to the city center.

**Abstract submission:** Prospective authors are requested to submit a 2-page abstract including figures and references. The abstract must be prepared following the format of the templates available at the website of the conference:

<http://europe.uab.es/upon2015>

**Final paper publication:** Works presented in the UPoN 2015 conference will be published online, after a peer reviewed process, as regular papers in a special issue of the *Journal of Statistical Mechanics: Theory and Experiment (JSTAT)*.

**Registration:** The registration is now open at the conference website. For any query E.mail to: [upon2015@mondial-congress.com](mailto:upon2015@mondial-congress.com)

### Important Dates:

Abstract submission:	February 15 25, 2015
Acceptance notification:	March 15 25, 2015
Early bird registration:	April 1 30, 2015
Conference:	July 13-17, 2015
Final paper submission	September 14, 2015

**T**he aim of the UPoN conference is to provide a forum for researchers working on different fields of noise, fluctuations and variability, where they can present their scientific problems which do resist solutions and discuss together in a fruitful atmosphere.

### Invited Speakers

<b>Yaroslav M. Blanter</b> <i>Classical and quantum non-linear dynamics in optomechanical systems</i>	Delft University of Technology	Netherlands
<b>Gianpietro Cagnoli</b> <i>Thermal and mechanical noise in gravitational wave detectors</i>	Laboratoire des Matériaux Avancés	France
<b>Sergio Ciliberto</b> <i>Fluctuation theorems: applications to energy fluctuations in electric circuits and micro devices</i>	Laboratoire de Physique de l'ENS	France
<b>Mark Dykman</b> <i>Rates of rare events: scaling, fragility, and delay effects</i>	Michigan State University	USA
<b>Zoltan Gingl</b> <i>How can the fluctuations in the motion of kayak-paddlers be used to estimate performance?</i>	University of Szeged	Hungary
<b>Peter Hänggi</b> <i>The role of temperature in different thermodynamic ensembles.</i>	University of Augsburg	Germany
<b>Laszlo Kish</b> <i>All that glitters is not gold: Zero-point energy in the Johnson noise of resistors</i>	Texas A&M University	USA
<b>Pietro Massignan</b> <i>From cell membranes to ultracold gases: classical and quantum diffusion in inhomogeneous media</i>	Institute of Photonic Sciences	Spain
<b>Vyacheslav R. Misko</b> <i>Active Brownian motion in confined geometries</i>	Universiteit Antwerpen	Belgium
<b>Irene Donato</b> <i>Is it possible to detect long-range interactions among biomolecules through noise and diffusion?</i>	Centre of Theoretical Physics	France
<b>Bernard Plaças</b> <i>Noise in graphene and carbon nanotube devices</i>	Département de Physique de l'ENS	France
<b>Sigmund Kohler</b> <i>Adiabatic Passage and Noise in Quantum Dots</i>	Inst. Ciencias de Materiales Madrid	Spain
<b>H. Eugene Stanley</b> <i>Signal and noise in economics and finance</i>	Boston University	USA
<b>Aneta Stefanovska</b> <i>Chronotaxic dynamics: when the characteristic frequencies fluctuate and the system is stable</i>	Lancaster University	UK

### Committee List

#### Local Committee (Universitat Autònoma de Barcelona)

Prof. Xavier Oriols (Conference Chair)  
 Dr. Guillermo Albareda  
 Prof. Xavier Cartoixà  
 Enriquer Colomé  
 Prof. David Jiménez  
 Damiano Marian  
 Prof. Javier Martín-Martínez  
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Kumiko Hayashi	Tohoku University	Japan
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