

# Conference on Driven Stochastic Transport in Low-Dimensional Systems



27-29 September 2016, IPM, Tehran, Iran



The Office of President  
Vice Presidency for Science and Technology

Iran National Science Foundation

Driven stochastic transport phenomena in low-dimensional systems have been a subject of multidisciplinary study in recent years, covering a multitude of research topics and applications ranging from nano-scale transport in biological systems to vehicular traffic modelling for exploration of the fundamental aspects of many-body systems driven out of thermal equilibrium. This conference aims to bring together leading researchers (both theoreticians and experimentalists) and young scientists in this very active multidisciplinary field. The main themes of the conference will include non-equilibrium exclusion processes in low dimensions, in particular, the paradigmatic asymmetric simple exclusion process, Brownian motion in confined geometries, stochastic transport of biological nano-motors, active Brownian dynamics and vehicular traffic flow.

**Topics:** Asymmetric exclusion processes, Active Brownian dynamics, Biological nano-motors, Brownian motion in confined geometries, Vehicular traffic flow



## Invited Speakers:

Chikashi Arita (Uni. of Saarbrücken, Germany)  
Mustansir Barma (TIFR, Hyderabad, India)  
Jordan Brankov (JINR, Dubna, Russia)  
Jan de Gier (Uni. of Melbourne, Australia)  
Claude Godreche (CEA Saclay, France)  
Farhad Jafarpour (Bu-Ali Sina Uni., Iran)  
Rui Jiang (Beijing Jiaotong Uni., China)  
Reinhard Lipowsky (MPI, Golm, Germany)  
Jerzy Luczka (TBC) (Uni. of Silesia, Poland)  
Mir Faez Miri (Uni. of Tehran, Iran)  
Ignacio Pagonabarraga (Uni. of Barcelona, Spain)  
Kazumasa Takeuchi (Tokyo Tech, Japan)

## Organisers:

Ebrahim Foulaadvand (ZNU & IPM, Iran)  
Anatoly Kolomeisky (Rice Uni., USA)  
Ali Naji (IPM, Iran)  
Gunter Schütz (FZ Jülich, Germany)

## International Advisory Committee:

Henk van Beijeren (Uni. of Utrecht, The Netherlands)  
Debashish Chowdhury (IIT Kanpur, India)  
Doochul Kim (Seoul National Uni., South Korea)  
Philipp Maass (Uni. of Osnabrück, Germany)  
Sidney Redner (Santa Fe Institute, USA)  
Andreas Schadschneider (Uni. of Cologne, Germany)  
Robin Stinchcombe (Uni. of Oxford, UK)



Iran Science Elites Federation



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