

International Conference on “Driven Stochastic Transport in Low Dimensional Systems”

Conference Programme

| Tuesday, 27 September 2016 | | |
|----------------------------|---------------------|--|
| 08:00 - 08:45 | Registration | |
| 08:45 - 09:00 | Opening | |
| Time | Speaker | Title of talk |
| 09:00 - 09:50 | Jerzy Luczka | Transient anomalous diffusion in periodic systems: ergodicity, symmetry breaking and velocity relaxation |
| 09:50 - 10:40 | Jordan Brankov | The totally asymmetric simple exclusion process on track with shortcut in the bulk |
| 10:40 - 11:10 | Break | |
| 11:10 - 12:00 | Kazumasa Takeuchi | ASEP as a surface growth model: universal fluctuation and its experimental test |
| 12:00 - 12:50 | Mustansir Barma | Ordered States with Giant Fluctuations (Pedagogical) |
| 12:50 - 14:30 | Lunch | |
| 14:30 - 15:20 | Farhad Jafarpour | On effective stochastic generator of 1D driven-diffusive systems |
| 15:20 - 15:50 | Vladislav Popkov | The Fibonacci family of dynamical universality classes |
| 15:50 - 16:20 | Caley Finn | Hydrodynamics for discrete lattice traffic networks. |
| 16:20 - 16:50 | Break | |
| 16:50 - 17:20 | Lele Zhang | Modeling traffic disruptions |
| 17:20 - 17:40 | Mahdi Zaeifi Yamchi | Effective interactions between colloidal particles immersed in a bath of chiral self-propelled microswimmers |
| 17:40 - 18:00 | Maryam Khatami | Self-propelled particles separate inside a maze |

Wednesday, 28 September 2016

| Time | Speaker | Title of talk |
|---------------|------------------------------|--|
| 09:00 - 09:50 | Claude Godreche | From the dynamics of spin systems to the ASEP |
| 09:50 - 10:40 | Reinhard Lipowsky | Stochastic modelling of protein synthesis by ribosomes |
| 10:40 - 11:10 | Break | |
| 11:10 - 12:00 | Ignacio Pagonabarraga | Collective behavior and pattern formation in actuated magnetic and Janus colloidal suspensions |
| 12:00 - 12:50 | Mustansir Barma | Condensate Formation in Aggregation-fragmentation Systems (Pedagogical) |
| 12:50 - 14:30 | Lunch | |
| 14:30 - 15:20 | Mir Faez Miri | Casimir Nanomachines |
| 15:20 - 15:50 | Thomas Ihle | Kinetic Theory of Self-Propelled Brownian Particles: Invasion Waves, Correlations and Memory Effects |
| 15:50 - 16:10 | Hossein Nili | Rodlike micro swimmers in couette flow : upstream swimming, shear-trapping and population splitting |
| 16:10 - 16:30 | Break | |
| 16:30 - 17:00 | Jalal Sarabadani | Polymer translocation through a nano-pore: Theory and simulation |
| 17:00 - 17:20 | Mehmet Can Uçar | Tug-of-War by Two Elastically Coupled Molecular Motors |
| 17:20 - 17:40 | Hamid Seyed-Allaei | Continuum theory of self-propelled particles in low noise |
| 17:40 - 18:00 | Bahareh Shakiba | The Strength of mRNA hairpin Regulates the Probability of Programmed Ribosomal Frameshifting |
| 19:00-21:00 | Conference Dinner | |

Thursday, 29 September 2016

| Time | Speaker | Title of talk |
|----------------------|--------------------------|--|
| 09:00 - 09:50 | Jan de Gier | Multi-species ASEP and Macdonald/Koornwinder polynomials |
| 09:50 - 10:40 | Reinhard Lipowsky | Multiscale Motility of Molecular Motors (Pedagogical) |
| 10:40 - 11:10 | Break | |
| 11:10 - 12:00 | Chikashi Arita | TASEPs with varying system length |
| 12:00 - 12:50 | Mustansir Barma | Aggregation, Fragmentation and Phase Transitions in 1D Systems |
| 12:50 - 13:00 | Closing | |
| 13:00 - 14:00 | Lunch | |