







Workshop: June 2nd, 2016

Computational Life Sciences: Mathematical modelling, uncertainty quantification and numerical simulation methods

| Schedule | Speaker | Title |
|---------------|---|---|
| 09:00 - 09:45 | Satya Swarup Samal (University of Bonn) | Analysis of biochemical reaction networks using tropical geometry and pathway-based methods |
| 09:45 - 10:30 | Ulrich Dobramysl (University of Cambridge) | Particle-based transport modeling: Applications to calcium puffs and filopodia |
| 10:30 - 11:00 | Coffee break | |
| 11:00 - 11:45 | Nikolaos Sfakianakis (University of Mainz) | A two scales approach in cancer motility and invasion |
| 11:45 - 12:30 | Hui Yu (RWTH Aachen) | On the self-organized hydrodynamic models of collective motions |
| 12:30 - 13:45 | Lunch break | |
| 13:45 - 14:30 | Diane Peurichard (University of Vienna) | Modelling self-organization in biological tissues: From agent-based to continuum models |
| 14:30 - 15:15 | Chandrasekhar Venkataraman (University of St Andrews) | Free boundaries on the cell boundary: Understanding biologically relevant asymptotic limits of a model for receptor-ligand dynamics |
| 15:15 - 15:45 | Coffee break | |
| 15:45 - 16:30 | James Grogan (University of Oxford) | A computational framework for multi-scale vascular tumour growth models |