**Schedule**

Workshop on "Applied PDEs and kinetic equations: from physics to life sciences and beyond"

Wolfgang Pauli Institute, Vienna  
18th – 20th April 2018

Organizers: Marie Doumic (WPI & INRIA)  
 Jan Haskovec (KAUST)  
 Marie-Therese Wolfram (Warwick & RICAM Linz)  
 Klemens Fellner (KFU Graz)  
 Lukas Neumann (U. Innsbruck)

**Wednesday 18th**

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| 14:00 - 14:45 | Uri Ascher, U. British Columbia  *“Numerical Methods in Visual Computing: what we can learn from each other”* |
| 14:50 – 15:35 | Jorge Zubelli, IMPIA  *“A Non-intrusive Stratified Resampler for Regression Monte Carlo with Applications to Reaction-Diffusion Equations.”* |
| 15:40 – 16:10 | Coffee break |
| 16:15 – 17:00 | Colloquium talk with Martin Burger  “Propagation of gradient flow structures from microscopic to macroscopic models” |
| 17:00 – 17:45 | Colloquium and reception |

**Thursday 19th**

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| 10:05 – 10:50 | Anne Nouri, U. Marseille  *“Bose condensates in interaction with excitations. Two-component space-dependent models close to equilibrium”* |
| 10:55 – 11:25 | *Coffee break* | |
| 11:25 – 12:10 | Ingenuin Gasser, U. Hamburg  *“A few examples of alternative energy power stations: modelling, simulation and optimisation”* | |
| 12:15 – 14:00 | *Lunch* | |
| 14:00 – 14:45 | J. Victor Small  *“Moving cells and pathogens with actin: from structure to mathematical models”* | |
| 14:50 – 15:35 | Dietmar Oelz, U. Queensland  *“Microtubule dynamics, kinesin-1 sliding and dynein action drive growth of cell processes”* | |
| 15:40 – 16:10 | Coffee break | |
| 16:10 – 16:55 | Angelika Manhart (NYU Courant)  *“Traveling Waves in Cell Populations”* | |
| 17:00 – 17:45 | Marie Doumic (INRIA c/o U. Wien & KAUST)  *“Some entropy-based results for linear and non-linear aggregation-fragmentation equations”* | |

**Friday 20th**

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| 9:15 – 10:00 | Vincent Calvez, ENS Lyon  *“Equilibria in quantitative genetic model”* |
| 10:05 – 10:50 | Gael Raoul, X Palaiseau  *“TBA”* |
| 10:55 – 11:25 | *Coffee break* |
| 11:25 – 12:10 | Carlotta Cuesta, U. Basque Country  *“Some aspects of a non-local regularisation of scalar conservation laws”* |
| 12:15 – 14:00 | *Lunch* |
| 14:00 – 14:45 | Clement Mouhot, U. Cambridge  *“TBA”* |
| 14:50 – 15:35 | Emeric Bouin, U. Paris-Dauphine  *“Hypocoercivity without confinement”* |
| 15:40 – 16:10 | Coffee break |
| 16:10 – 16:55 | Peter Markowich (WPI c/o U. Wien & KAUST)  “Discrete and continuum modeling of biological network formation” |
| 17:00 – 17:45 | Final Remarks |