

**Programme: SPP 1726: Microswimmers
Annual Meeting 23-24 May 2019**

23 May 2019

08.00 Departure from Ibis Hotel

08.30-09.00: Registration

09.10-09.15: Opening

09.15-10.55: Session 1

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| 1) | Babak Vajdi Hokmabad | Stop and go droplets. |
| 18) | Nadir Möller | pH driven Modular Micro swimmers - State and prospects. |
| 3) | Narinder Narinder | Dynamics of Self-propelled Particles in Viscoelastic Fluid under various Geometric Constraints. |
| 4) | Peer Fischer | Do enzymes show enhanced diffusion when they are catalytically active? |
| 5) | Frank Cichos | Controlling active particle motion by light. |

10.55-11.20: Coffee Break

11.20-13.00: Session 2

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| 6) | Debarati Sarkar | A minimal Model for fluid and cohesive motile cell colonies. |
| 7) | Vitali Telezki | Magnetotactic bacteria. |
| 20) | Pooja Arya | Living clusters of light driven colloidal microswimmers. |
| 22) | Florian Dittrich | Phase behaviour of active Brownian particles. |
| 10) | Alexander Sukhov | Resonant motion of triangular magnetocapillary swimmers. |

13.00-14.20 Lunch

14.20-15.20 Session 3

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| 11) | Michael Kuron | Squirmer in Visco(elastic) Media: Swimming close to and far away from Boundaries. |
| 12) | Jan Hansen | SpermQ – A Simple Analysis Software to Study Ciliary Beating and Sperm Steering. |
| 13) | Luis Alvarez | The Steering Gates of Sperm. |

15.20-16.20 Coffee Break + Poster session

16.20-17.40 Session 4

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| 14) | Christian Wischnewski | Swimming by hysteretic shape transitions of swelling elastic disks. |
| 15) | Christian Hoell | Statistical theory of microswimmer suspensions: Collective orientational ordering through hydrodynamic interactions. |
| 16) | Shubhadeep Mandal | MPCD modeling of nematic liquid crystals. |
| 17) | Katerina Dvorackova | Non-linear mechanical response of a soft microgel helix. |

18.00 – 20.30 Dinner at Caesar**20.30 Bus to Ibis****24 May 2019****08.30: departure from Ibis hotel****09.15-10.35 Session 5**

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| 2) | Tao Huang | Exclusion phenomena of light-driven Janus Ag/AgCl microswimmers in a dense colloidal matrix. |
| 25) | Judit Clopes Llahi | Swimming behavior of squirmer polymers. |
| 30) | Nathalie Jurisch-Yaksi | Studying the regulation and coordination of ciliary beating. |
| 9) | Benjamin Friedrich | Synchronization of cilia and flagella. |

10.35-11.00 Coffee break**11.00-12.20: Session 6**

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| 21) | Friedrich Striggow | Sperm-driven micromotors in oviduct fluid and highly viscous media. |
| 23) | Felix Rühle | Collective Dynamics of Bottom-Heavy Squirmer. |
| 24) | Julian Reichert | Transport coefficients of dense active Brownian particles. |
| 19) | Sergi Roca Bonet | Dimeric and trimeric colloidal swimmers driven by thermophoresis. |

12.20-12.25 Conference Photo**12.25-14.00 Lunch**

14.00-12.20 Anouncements/Organizational

14.20-15.20 Session 7

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| 26) | Mihail Popescu | Mean-field models for collective dynamics of chemically active particles. |
| 28) | Mojdeh Heidari | Impact of brush/water interface on self-propulsion of Janus particles. |
| 29) | Linlin Wang | Interaction studies and applications of light driven titania microswimmers. |

15.20-15.50 Final discussion and concluding remarks

15.50 Departure

List of Posters

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| 1) | Thomas Palberg | Modular microswimming: state of the art and future prospects. |
| 2) | Yara Alsaadawi | ?? |
| 3) | Anna Eichler-Volf | Polymer nanorod-like microswimmers with controllable tip shape. |
| 4) | Kai Qi | Enhanced rotational diffusion of squirmers in viscoelastic fluids. |
| 5) | Sarah Mohammadinejad | Magnetotactic bacteria: Swimming and reorientation mechanism. |
| 6) | Daniel Geiß | Brownian Molecules Formed by Delayed Harmonic Interactions. |
| 7) | Corinna Maaß | Active droplet swimmers. |
| 8) | Klaus Kroy | Janus swimmers in heterogeneous activity fields. |
| 9) | Julian Reichert | Transport coefficients of dense active Brownian particles. |
| 10) | Nicola Söker | Properties of active Brownian particles under inhomogeneous activity. |
| 11) | Sergi Roca | Microswimmers self-propelled by thermophoresis. |
| 12) | Hendrik Ender | Marangoni swimming at a fluid-fluid interface. |
| 13) | Priyanka Sharan | Microfluidic fabrication of soft polymer particles. |
| 14) | Juliane Simmchen | Galvanic replacement reactions to propel Janus particles. |
| 15) | Oliver Jung | Design of a snap buckling microgel. |
| 16) | Aitor Martin Gomez | Active Brownian filaments in dilute solutions. |
| 17) | Anton Solovev | Hydrodynamic interactions in cilia carpets. |
| 18) | Felix Bachmann | Dynamics of Rigid Magnetic Micropropellers. |
| 19) | Nadir Möller | Role of pH in Microswimming. |
| 20) | Denis Botin | Measuring Colloidal Dynamics in Turbid Suspensions. |
| 21) | Ana-Suncana Smith | Microswimming at interfaces. |
| 22) | Jan Hansen | SpermQ – A Simple Analysis Software to Comprehensively Study Ciliary Beating and Sperm Steering. |
| 23) | Shubhadeep Mandal | MPCD modeling of nematic liquid crystals. |
| 24) | Svetlana Santer | Living clusters of light-driven colloidal microswimmers. |
| 25) | Sebastian Rode | Sperm motility in modulated microchannels |
| 26) | Gerrit Vliegenthart | Filamentous Active Matter: Band Formation, Bending, Buckling, and Defects |