

PROGRAM

Sunday, August 21: **Arrival**

16:00-18:00 registration, uploading e-presentations, posters display (IPPT entrance hall)

18:00-19:00 welcome reception (MED)

20:00 symphonic concert (Warsaw Philharmonic Concert Hall, Jasna Street 5)

Monday, August 22: **A variety of particles**

8:00-8:30 registration (IPPT entrance hall)

8:30-8:45 opening (IPPT auditorium)

8:45-10:00 Sedimentation at non-Brownian time scale - chair: F. Feuillebois

8:45-9:15 **J. Hinch**, *Fluctuations in the velocities of sedimenting particles*

9:15-9:30 **G. Abade**, *Stationary sedimentation of non-Brownian suspensions: Stokesian dynamics simulations using Fast Hydro-Multipole Method*

9:30-10:00 discussion

10:00-10:30 coffee

10:30-12:10 Brownian and hydrodynamic interactions of non-spherical particles - chair:

J. Bławdziewicz

10:30-11:00 **R. G. Winkler**, *Non-equilibrium dynamics of semiflexible polymers in solution*

11:00-11:15 **P. Szymczak**, *Hydrodynamic effects in proteins*

11:15-11:30 **B. Cichocki**, *Suspensions of arbitrary-shaped particles - Brownian contribution to intrinsic viscosity*

11:30-12:10 discussion

12:10-13:30 lunch (MED)

13:30-14:45 Active particles - chair: B. U. Felderhof

13:30-14:00 **H. Stark**, *Active particle systems under gravity and in Poiseuille flow*

14:00-14:15 **M. Popescu**, *Catalytically Active Colloids as Particle Carriers*

14:15-14:45 discussion

14:45-14:55 break

14:55-15:45 Permeable particles - chair: H. Diamant

14:55-15:10 **D. van den Ende**, *Aging of soft colloidal suspensions studied by macro and micro rheology*

15:10-15:25 **M. L. Ekiel-Jeżewska**, *Hydrodynamics of permeable particles suspensions*

15:25-15:45 discussion

15:45-16:15 coffee

16:15-17:15 Poster session (IPPT entrance hall)

17:15-18:25 Deformable particles and biosystems - chair: R. G. Winkler

17:15-17:30 **C. Misbah**, *Vesicles and red blood cells under flow in the Stokes regime*

17:30-17:40 **H. Selmi**, *Fast Multipole Method for complex flows*

17:40-17:55 **O. Sano**, *Motion of Droplets under Shear Flow with Suction*

17:55-18:25 discussion

18:30-19:30 dinner (MED)

19:30-20:30 Methods of solving the Stokes equations - which when?

General discussion - chair: B. Cichocki, C. Misbah, R. G. Winkler (IPPT auditorium)

Tuesday, August 23: **Particles and interfaces**

8:20-10:00 Confined multiparticle systems - chair: H. Stark (IPPT auditorium)

8:20-8:50 **B. U. Felderhof**, *Pumping a ferrofluid*

8:50-9:05 **H. Diamant**, *Hydrodynamic interactions between confined particles*

9:05-9:20 **E. Climent**, *Plugging by spherical microparticles*

9:20-10:00 discussion

10:00-10:30 coffee

10:30-11:20 Hydrodynamic interactions in confined systems - chair: B. Cichocki

10:30-10:45 **J. Bławdziewicz**, *Buckling transition in wall-bounded hydrodynamic crystals*

10:45-11:00 **E. Wajnryb**, *Many-body hydrodynamic interactions in a microchannel*

11:00-11:20 discussion

11:20-12:35 A particle under confinement - chair: O. Sano

11:20-11:35 **M. Duits**, *Anisotropic and hindered diffusion of colloidal particles in a closed cylinder*

11:35-11:50 **N. Lecoq**, *Creeping motion of a particle along the axis of axisymmetric containers*

11:50-12:05 **V. Lobaskin**, *Microparticle motion past a structured surface*

12:05-12:35 discussion

12:35-13:55 lunch (MED)

13:55-15:10 Particle-interface interactions - chair: D. van den Ende

13:55-14:10 **F. Pigeonneau**, *Low-Reynolds-number gravity-driven migration and deformation of bubbles near a free surface*

14:10-14:25 **M. Krasowska**, *Thin film drainage and surface forces between rigid and soft surfaces studied with (interferometry) AFM*

14:25-14:40 **S. Khabthani**, *Motion of an ellipsoidal particle in a shear flow along a porous slab*

14:40-15:10 discussion

15:10-15:20 break

15:20-16:35 Slip at interfaces - chair: O. Vinogradova

15:20-15:35 **A. Sellier**, *Migration of a solid and arbitrarily-shaped particle near a plane slipping wall*

15:35-15:50 **E. Yariv**, *Streaming-potential revisited*

16:50-16:10 discussion

16:10-17:00 coffee

17:00-18:10 Slip in suspensions - chair: J. Hinch

17:00-17:40 **F. Feuillebois**, *Influence of wall slip in dilute suspensions*

17:40-18:10 discussion

19:00 Birthday Dinner ("U Aktorów", Al. Ujazdowskie Street 45)

Wednesday, August 24: **Stokes flows and beyond**

8:50-9:40 Inertial effects - chair: F. Feuillebois (IPPT auditorium)

8:50-9:05 **A. Ambari**, *Stokes' paradox and force undergone by a sphere or cylinder in an unbounded power law fluid*

9:05-9:20 **A. Mongruel**, *Near-wall hydrodynamic interactions between a settling sphere and a wall*

9:20-9:40 discussion

9:40-10:10 coffee

10:10-11:00 Texture and self-assembly - chair: C. Misbah

10:10-10:25 **O. Vinogradova**, *Superhydrophobic textures for micro- and nanofluidics*

10:25-10:40 **A. Ciach**, *Mesoscopic theory for equilibrium properties of self-assembling particles in molecular solvents*

10:40-11:00 discussion

11:00-11:10 break

11:10-12:10 Challenges in microhydrodynamics

General discussion - chair: B. U. Felderhof, J. Hinch, H. Stark (IPPT auditorium)

12:10-12:40 announcing the contest winners and closing

12:40-13:50 lunch (MED)

13:50-20:30 sightseeing + informal dinner (meeting point: IPPT entrance hall)

21:00 piano recital (Witold Lutosławski Polish Radio Concert Studio, Woronicza Street 17)

Thursday, August 25: **A satellite meeting**

9:00-10:30 **Young researchers ask B.U. Felderhof** (IPPT auditorium)