

EARTHFLOWS 2015

Interface Dynamics during Geophysical Flows

The 1st EarthFlows seminar, 18-19 June 2015

Location: Lille Fysisk Aud, Physics Building, UiO

Thursday 18th of June

0915-0920 *Bjørn Jamtveit (PGP) Welcome*

0920-1000 *The EarthFlows lecture*

Marc Olivier Coppens (Centre for Nature Inspired Engineering, UCL)

A random walk through porous media: Diffusion under confinement

1000-1015 Coffee break and Discussions

Nanopores & film

Chair: Dag K. Dysthe

1015-1045 *Evgeniy Redekop (SMN/Dept of Chemistry, UiO) Diffusion and reactions in nanoporous materials*

1045-1115 *Anders Malthe-Sørenssen et al (PGP) Transport in nanoporous materials*

1115-1145 *Anja Røyne (PGP) The role of nanoconfined fluid films in fracture propagation and healing*

1200-1330 Lunch

Granular flows/Dispersions/Multiphase

Chair: Luiza Angheluta

1330-1400 *Knut Jørgen Måløy (Dept of Phys, UiO) Steady-state, simultaneous two-phase flow in porous media*

1400-1430 *Eirik Flekkøy et al (Dept of Phys, UiO) Granular displacement patterns in the lab and the field*

1430-1445 Coffee break

Chair: Atle Jensen

- 1445-1515 *Carl Harbitz (NGI)* Submarine landslides
- 1515-1545 *Graziella Devoli (Dept of Geosci)* Modeling debris flows: state-of-the-art
- 1545-1615 *Marcin Dabrowski (PGP)* Flow of multiphase systems
- 1615-1645 *Karen Mair (PGP)* Flow in faults
- 1900 Dinner

Friday 19th of June

Dynamic fluid-fluid interfaces

Chair: Anja Røyne

- 0915-0945 *Atle Jensen (Math Dept, UiO)* Waves in pipes and channels
- 0945-1015 *Joachim Mathiesen (Univ Copehagen)* Anomalous dispersion in (laminar) porous flow
- 1015-1030 Coffee

Dynamic fluid-condensed material interfaces

Chair: Renaud Toussaint

- 1030-1100 *Kent Andre Mardal (Math, UiO)* Flows in complex geometries such as blood vessels and the central nervous system
- 1100-1130 *Luiza Angheluta (PGP)* Spectral link for absolute dispersion in turbulent pipe flow
- 1130-1200 *Christopher Hawkins (PGP)* Ballistic aggregation during pipe-flow
- 1200-1230 *Olivier Galland (PGP)* Magma-wall interactions during volcanic eruptions
- 1230-1530 Lunch and time for individual meetings with external guests etc

Flow in/on erosive-/reactive-/stressed- materials

Chair: Francois Renard

1530-1600 *Piotr Szymczak (Univ of Warsaw)* On the formation, growth, and shapes of solution pipes

1600-1630 *Renaud Toussaint (Univ Strasbourg)* Formation of channels and fractures: the role of fluids and temperature

1630-1700 *Bjørn Jamtveit (PGP)* Reactive flow in the Earth's crust

1800 Summer party