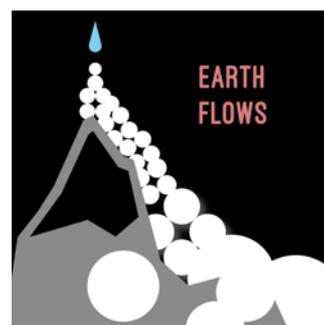


EARTH FLOWS 2017

Interface Dynamics during Geophysical Flows

3rd EarthFlows seminar,
15-16 June 2017, Oslo Science Park



Thursday 15th of June

0915-0920 *Luiza Angheluta/Bjørn Jamtveit (EF/PGP) Welcome*

0920-1000 *The EarthFlows lecture*

Jorge Vinals (Univ. of Minnesota, USA)

Rheology and flows at the mesoscale

1000-1015 Coffee break and Discussion

Turbulent flows

Chair: Joe LaCasce

1015-1045 *Cristobal Lopez (IFISC, Mallorca) Flow networks: a useful tool to study marine ecosystems*

1045-1115 *Marta Sanchez de Lama (EF/IG) Turbulent dispersion in the Nordic seas*

1115-1145 *Anis Awal Ayati (EF) Air-flow structure above a wavy interface in stratified air-water pipe flow*

1145-1215 *Audun Skaugen (PGP, UiO) Spectral energy and vortex clustering in quantum turbulence*

1215-1345 Lunch

Flows in complex systems

Chair: Eirik Flekkøy

1345-1415 *Emilio Hernandez-Garcia (IFISC, Mallorca) Stretching fields in the ocean: transport and coherent structures*

1415-1445 *Joachim Mathiesen (NBI, Copenhagen) Laminar and transitional flows in complex geometries*

1445-1515 *Knut Jørgen Måløy (EF) TBA*

1515-1530 Coffee break

Fracture and friction processes

Chair: Julien Scheibert

1530-1600 *Piotr Szymczak (Univ of Warsaw, Poland) Karst-on-a-chip: dissolving gypsum fracture in a microfluidic cell*

1600-1630 *Stephane Santucci (LP-ENS, Lyon)] Multiscale stick-slip dynamics of adhesive tap peeling*

1630-1700 *Julien Scheibert (Ecole Centrale Lyon, France) Onset of sliding of rough contacts*

1700-1715 Break

Dislocation patterns in rocks

Chair: Audun Skaugen

1715-1745 *Patrick Cordier (UMET, Universite Lille) What numerical modeling tells us about flow in planetary interiors*

- 1745-1815 *Bjørn Jamtveit (EF, PGP)* Microstructural records of deep crustal earthquakes
1900 Dinner

Friday 16th of June

Fluid migration and magma dynamics

Chair: Ben Rogers

- 0915-0945 *Laurent G.J. Montesi (Univ of Maryland, USA)* Speed of melt migration at mid-ocean ridges: A multiscale approach
0945-1015 *Muriel Gerbault (Toulouse, France)* Stress rotation and inferences on magma pathways from elasto-plastic numerical models, at 2 scales around magma chambers and in a lithosphere above a mantle plume
1015-1030 Coffee break

Rock deformation and failure

Chair: Anis Ayati

- 1030-1115 *Wenlu Zhu (Univ of Maryland, USA)* Effect of pore pressure on rupture propagation
1115-1145 *Francois Renard (EF, PGP)* The microscale dynamics of precursors to failure in rocks
1145-1215 *Anders Malthe-Sørenssen (EF, PGP)* TBA
1215-1400 Lunch

Ice, glacier motion

Chair: Aylin Dursun

- 1415-1500 *Jerome Weiss (ISTERre, France)* Sea ice rheology and fracturing: A perspective across scales
1500-1530 *Andreas Käab (EF)* Collapsing glaciers
1530-1600 *Kjetil Thøgersen (EF, PGP)* Glacier sliding laws