

Session I: Physics of Complexity

- L. de Arcangelis: A dynamical scaling approach to earthquake occurrence
- A. Baldassarri: Noise and fluctuations in granular dynamics
- F. Dalton: Understanding the vibrational dependence of friction in granular tribology - thick & thin layers
- C. Prado: Self-organized criticality, complex networks and earthquakes
- A Corral: Power Laws and Scaling Laws in Earthquake Occurrence

Session II: Fault Mechanics and Earthquake Rupture

- M. Cocco: Friction and faulting: observational and modeling constraints from seismology
- J-P Ampuero: The diversity of rupture styles during earthquake nucleation and dynamic rupture
- J. Rubenstein: Small Repeating Earthquakes are Time- and Slip-Predictable When Magnitudes are Improved
- G. Di Toro: Rock friction during earthquakes
- S. Nielsen: Complex dynamic rupture in laboratory nanoearthquakes

Session III: Grains and Granular Mechanics

- B. Behringer: Complexity in Granular Materials: from the Microscale to the Macroscale
- E. Clement: Vibrations in granular matter from sound propagation to granular activation
- P. Johnson: Effects of Acoustic Waves on Stick-Slip Behavior in Sheared Granular Media
- O. Pouliquen: Rheology of granular flows: the role of the interstitial fluid

Session IV: Shear Localization and Faulting

- E. Aharonov: Pore pressure evolution in shearing faults and granular media
- C. Collettini: Frictional behavior of "weak" phyllosilicate-rich faults
- H. Savage: Collateral Damage: Capturing Fault Strand Formation in Fracture Profiles

Session V: Friction and Surface Dynamics

- J. Fineberg: Crack-like processes at the onset of frictional motion - Is slow frictional sliding really a slow process?
- I. Szlufarska: Atomistic simulations of nanomechanical properties of brittle materials:
 - (i) friction at a single asperity level, (ii) effect of grain boundaries
- O. Ben-David: Slip-Stick: the Dynamics of Contact Evolution in Dry Friction
- M. Urbakh: Modeling friction: from the nano- to macro-scales
- M. Robbins: Friction in Multi-Asperity Contacts and "Earthquakes" in Sheared Solids

Session VI: Fault Interaction and Earthquake Dynamics

- A. Helmstetter: Earthquake triggering by stress changes: Observations and modelling using the rate and state friction law
- E. Brodsky:
- H. Noda: 3D earthquake cycle simulations accounting for thermal pressurization of pore fluids