


From rock mechanics to dynamic modeling of fault slip

Tuesday, October 22, 2019

11am – 3pm

Buwalda Room (151 Arms)



Friction constitutive laws for seismic and aseismic faulting: Why do we need something as complex as rate/state?

Start	End	Presentor	Title
11:00	12:00	Chris Marone	Friction constitutive laws for seismic and aseismic faulting: Why do we need something as complex as rate/state? (tentative)
12:00	12:15	Lu Yao	Thermal pressurization in high-velocity friction experiments on dolerite under elevated pore pressure
12:15	12:30	Krittanon (Pond) Sirorattanakul	Experimental study of the interactions between fluid and failure of rock faults in shear in three-dimension
12:30	12:45	Qiuyi (Bing) Li	Seismic energy partitioning of fracture processes in Opalinus clayshale and Barre granite
12:45	1:00		Break
1:00	1:15	Krittanon (Pond) Sirorattanakul	Imaging slow-slip events beneath Nicoya peninsula in Costa Rica
1:15	1:30	Kyungjae Im	Universal mechanism for slow earthquakes rooted in laboratory friction
1:30	1:45	Luca Dal Zilio	Exploring slow slip events and their scaling in 3D simulations of fault slip
1:45	2:00	Elias Heimisson	Poroelastic effects destabilize mildly rate-strengthening friction to generate stable slow slip pulses
2:00	2:05		5 min Coffee Break
2:05	2:20	Valere Labert	Modeling the low-stress, low-heat operation of mature faults
2:20	2:35	Kavya Sudhir	Slip patterns on heterogeneous fault interfaces governed by rate-and-state friction (tentative)
2:35	2:50	Ollie Stephenson	Simplified Elastodynamic Modeling of Potential Dynamic Rupture Through Creeping Fault Sections