WORKSHOP ON TECTONIC DEFORMATION AND EARTHQUAKE MECHANISM
May 9-10, 2018, Meeting Hall (3rd floor) at Institute of Geology, CEA
Wednesday May 9
Morning  Chair: Jing Liu

9:25—9:30
- Welcome remarks
  Shengli Ma (Institute of Geology, China Earthquake Administration)

9:30—10:30
- Resolving megathrust slip to the trench and its implications
  Thorne Lay (University of California, Santa Cruz)
- Discovery of the impact site of the Australasian strewnfield beneath a
  volcanic field in southern Laos
  Kerry Sieh (Nanyang Technological University)

10:30—10:45  Tea Break

10:45—11:45
- Fault slip and GPS velocities across the Shan Plateau define a curved
  southwestward crustal motion around the eastern Himalayan syntaxis
  Xuhua Shi (Nanyang Technological University)
- Glacially driven formation of high-elevation, low-relief landscapes in
  eastern Tibet
  Huiping Zhang (Institute of Geology, China Earthquake Administration)
Wednesday May 9
Afternoon Chair: Changrong He, Toshihiko Shimamoto

13:30—15:30
- Low to high-velocity friction apparatuses: from Beijing to Chengdu machines, and beyond
  Toshihiko Shimamoto (Institute of Geology, China Earthquake Administration)
- Laboratory acoustic emission, stick-slip nucleation and cascading rupture
  David Lockner (US Geological Survey)
- Laboratory observation of meta-unstable stage and preslip of fault before earthquake
  Yanqun Zhuo (Institute of Geology, China Earthquake Administration)
- Unstable slip events on large-scale experimental fault zones with spatially varying fault gouge lithologies
  Arendje Jozina Louise (Utrecht University)

15:30—16:00 Tea break

16:00—17:30
- Microphysical model predictions of the limit to fault restrengthening: logarithmic vs. power law healing
  Jianye Chen (Utrecht University/Institute of Geology, CEA)
- Weak velocity weakening when controlled by pressure solution
  Changrong He (Institute of Geology, China Earthquake Administration)
- Importance of flash heating in dynamic weakening of dry and wet fault gouges
  Lu Yao (Institute of Geology, China Earthquake Administration)
Thursday May 10
Morning Chair: Hongfeng Yang, Jianye Chen

9:00—10:30
- Why do catastrophic earthquakes occur not everywhere?—the characteristics of crustal metastability in the tectonic stress field
  Yuri Rebetsky (Instituet of Physics of Earth, Russian Academy of Sciences)
- Significance of a ductile shear zone below a seismogenic fault: Overall stress vs. slip rate relation and response to stress perturbation
  Hiroyuki Noda (Kyoto University)
- Deriving frictional properties on seismogenic fault from spontaneous rupture simulations and seismic/geodetic observations
  Hongfeng Yang (Chinese University of Hong Kong)

10:30—10:45 Tea Break

10:45—11:45
- A review of magnetotelluric studies of the Tibetan Plateau: New insights into crustal deformation and earthquake hazards
  Martyn Unsworth (University of Alberta)
- Seismogenic context of the 2017 Jiuzhaigou Ms7.0 earthquake in the Songpan-Ganzi block inferred from 3-D magnetotelluric imaging
  Yan Zhan (Institute of Geology, China Earthquake Administration)
Thursday May 10
Afternoon  Chair: Huiping Zhang

13:30—16:00
- Tectonics and earthquakes of the North Anatolian fault and surrounding area
  Koji Okumura (Hiroshima University)
- Quaternary activity of normal faults in southern Tibet
  Jerome van der Woerd (University of Strasbourg)
- Hunting for high-resolution paleoseismic records on the Haiyuan and Altyn Tagh faults
  Jing Liu, (Institute of Geology, China Earthquake Administration)
- Characterizing rupture propagation from slip-rate gradients through the Pingding Shan restraining bend of the Altyn Tagh fault, northwest China
  Veronica Prush (University of California, Davis)
- Hidden earthquake potential in plate boundary transition zones
  Kevin Furlong (Penn State University)

16:00—17:30  Laboratory tour