



CALIFORNIA INSTITUTE OF TECHNOLOGY
Division of Engineering and Applied Science
Division of Geology and Planetary Sciences
Pasadena, California 91125

Deep Dive 2026: Induced Earthquake Physics
Center for Geomechanics and Mitigation of Geohazards (GMG)

August 20–21, 2026.

Virtual Event

8:00 AM– 11:00 AM Pacific Time.

Day 1: Thursday, August 20, 2026.

8:00 - 8:05 am	Opening Remarks (Jean-Philippe Avouac & Nadia Lapusta)
8:05 - 8:35 am	- Overview of Physics of Induced Seismicity (Alexis Sáez)
8:35 - 9:05 am	- Rate-and-State Friction: Fundamentals and Consequences for Earthquake Physics (Mary Agajanian)
9:05 - 9:20 am	Break
9:20 - 9:50 am	- Friction in the Presence of Fluid Injections: Fundamentals and Consequences for Induced Seismicity (William Chen)
9:50 - 10:20 am	- Friction in the Laboratory (Mohamed Abdelmeguid)
10:20 - 11:00 am	Discussion + Q&A

Day 2: Friday, August 21, 2026.

8:00 - 8:30 am	- Triggering by Pore Pressure Diffusion and Poroelastic Stressing (Samson Marty)
8:30 - 9:00 am	- Triggering by Aseismic Slip (Alexis Sáez)
9:00 - 9:15 am	Break
9:15 - 9:45 am	- Physics of Earthquake Arrest and Controls on Magnitude (Alexis Sáez)
9:45 – 10:15 am	- Effects of Reservoir Geometry, Compaction and Fault Offset (Qian Shi)
10:15 - 11:00 am	Discussion + Q&A