



CALIFORNIA INSTITUTE OF TECHNOLOGY

Division of Engineering and Applied Science
Division of Geological and Planetary Sciences
Pasadena, California, 91125



NSF/IUCRC for The Center for Geomechanics and Mitigation of Geohazards (GMG)

Fall 2024 Hybrid GMG-IAB Meeting (YR6)

Day 1: Wednesday, September 18, 2024

Location: Sharp Lecture Hall (Arms, 155)

Agenda Details:

8:00 – 8:45 am	Participant Registration, Breakfast, and Networking Time
8:45 – 9:00 am	Welcome Remarks
9:00 – 10:30 am	<p>Projects Review Session I <u>Chair: Domniki Asimaki</u></p> <ul style="list-style-type: none"> • <i>GMG-6.6</i> Experimental investigation of the interaction between fluids & failure of rock faults in shear (Rosakis) • <i>GMG-4.6</i> Understanding conditions for stable/unstable fault slip induced by fluid injections (Lapusta) • <i>GMG-13.2</i> A Discrete Fault Network model to forecast induced earthquakes, creep and tremors (Im). • <i>GMG-11.3</i> Forecast and Control of Injection-Induced Seismicity, rates and magnitudes (Avouac).
10:30 – 12:00	<i>Poster Session I</i>
12:00 – 1:00 pm	LUNCH

1:00 – 2:30 pm	Projects Review Session II <u>Chair: Nadia Lapusta</u> <ul style="list-style-type: none"> • GMG-9.6 DAS for seismic and aseismic fluid movements (Zhan) • GMG-15.2 Non-ergodic ground motion models for O&G fields, applied at Groningen (Asimaki) • GMG-14.2 CO2 Emissions along faults in geothermal fields (Stock) • GMG-10.3 Characterizing geothermal tremor (Husker).
2:30 – 4:00 pm	<i>Poster Session II</i>
4:00 – 5:00 pm	Enhancement Projects <ul style="list-style-type: none"> • GMG-EP-3 Induced Earthquakes in the Permian Basin (Marty) • GMG-EP-2 Learning from Groningen (Acosta)
5:00 – 6:00 pm	Coffee Table Discussions
6:00 – 8:00 pm	DINNER

Hybrid participation: Remote participants will be able to attend all the oral presentations. They will be able to provide feedback using the Airtable forms. They won't be able to participate to the poster session, coffee table discussion and social events. Live presentations will be recorded and posted during the meeting.

Projects Review (all participants): The PI will coordinate Lightning talks by the students, postdocs and collaborators involved in each project.

Poster Session (all participants): Informal discussions around the posters. The poster will present the same material as in the one covered by the pre-recorded presentations.

Coffee table discussions (all participants): One PI and one person from IAB in charge of reporting will stay at the same table. All others can rotate from one table to the other during the discussion.

IAB Organizational Meeting and Formative Discussion (IAB Members only): Discussion of impressions of previous day presentations and Airtable review. Formulation of recommendation/feedback to Center Leadership

IAB Meeting (IAB Members, and center directors): Discussion of proposed projects; Voting; Formulation of funding recommendation to Center Leadership.



Day 2: Thursday, September 19, 2024



Location: Sharp Lecture Hall (Arms, 155) & Conference Room (NM 212) for IAB Meetings

Agenda Details:

8:00 – 9:00 am	Breakfast and Networking Time (all participants)
9:00 – 10:30 am	<p>Presentations by Industry Members</p> <ul style="list-style-type: none"> • “Delivering Clean Power from SuperHot Rocks” Alain Bonneville, Mazama Energy. • TBD José Alvarellos, REPSOL
10:30 – 11:00 am	BREAK around the posters
11:00 – 12:00 pm	<p><i>Topical Presentation</i> “Status of GMG Research on CO2 storage and induced seismicity” (Acosta, Fu and Avouac)</p>
12:00 – 1:00 pm	LUNCH
1:00 – 2:30 pm	Debriefing and Airtable Forms Review (all participants)
2:30 – 3:30 pm	IAB Organizational Meeting (IAB Members and Center Directors)
3:30 – 4:30 pm	IAB Meeting (IAB Members)
4:30 – 5:30 pm	BREAK
5:00 – 6:00 pm	Summary Report and Closing Remarks (all participants)
6:00 – 8:00 pm	DINNER

Day 3: Friday, September 20, 2024

Location: Arms backyard.

8:40 am – 3:00 pm Visit of the Mount Wilson Observatory and Geology of the San Gabriel Mountains.

*Lunch boxes will be provided.