ERL Founding Members Consortium: Overview

Bradford H. Hager

Director, Earth Resources Laboratory and Cecil and Ida Green Professor Department of Earth, Atmospheric and Planetary Sciences

Co-Director, Center for Carbon Capture, Utilization and Storage MITEI

MIT Earth Resources Laboratory 2017 Annual Founding Members Meeting May 31, 2017





Logistics

- Emergency Exits
- Restrooms
 - Common floor plan on every floor

ERL's Mission

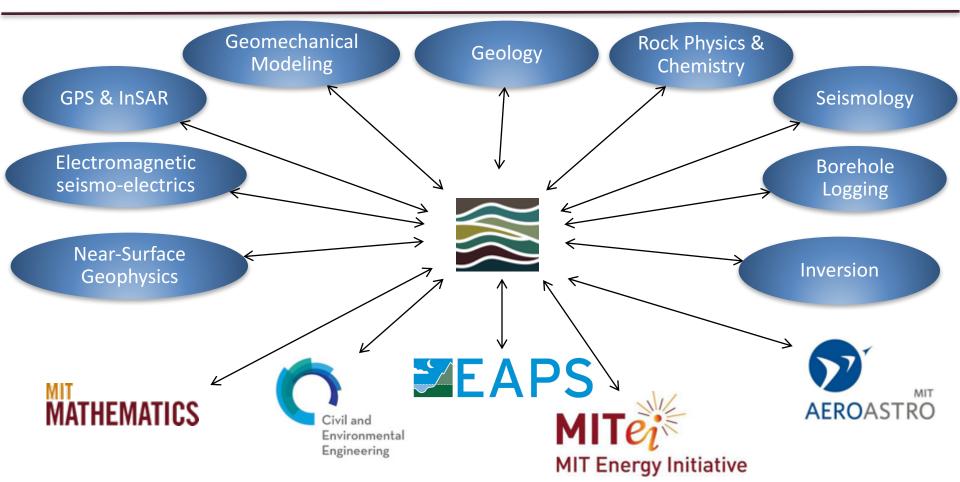
- Research at the cutting edge of Subsurface Science
 - Broad and interdisciplinary
 - Applications to sponsor-specific problems
- Educate future leaders of industry and academia
- Reputation for excellence and integrity



ERL's Unique Capabilities

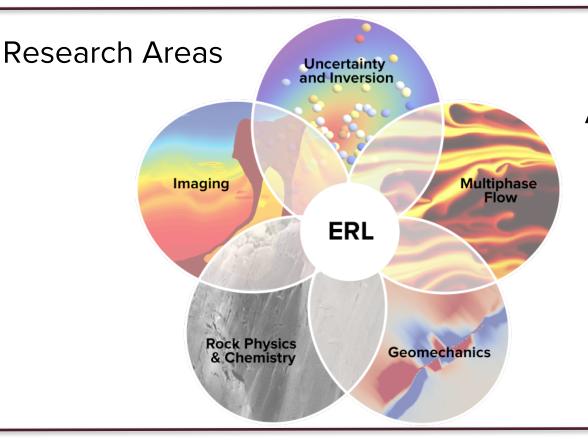
- Draws expertise from across MIT provides breadth of knowledge while maintaining depth of expertise
- Ability to assemble teams of experts from different disciplines to solve complex problems

ERL's Multiple Disciplines



- ~ 12 Faculty
- ~ 10 Research Scientists
- ~ 20 Post-docs
- ~ 30 Students
- ~ 10 Visitors and Affiliates
- 3 Administrative staff

ERL Research Areas and Applications



Applications

- Monitoring Change
- CO₂ Sequestration
- Induced Seismicity
- Unconventionals
- Water



ERL - Current Reports

On your USB stick

Recent ERL Publications, 2016 - 2017

Extended abstracts

Journal articles

Over 70 titles in total

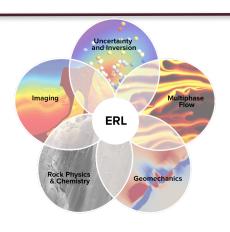
Slides from the meeting (drafts)

Today's Agenda

- 09:00 Welcome and ERL Overview
- 09:10 Session 1: Geomechanics, Part I Earthquakes
- 10:40 Session 2: Induced Seismicity and Joint Inversion
- 11:40 Student/Postdoc Introductions
- 12:00 Lunch
- 13:00 Plenary Session:

Brad Hager - Lab to field scale: Lab Experiments and Numerical Simulations Kristin Bergmann – Thermal evolution of carbonate reservoirs and basin history

- 14:20 Session 3: Geomechanics, Part 2 Hydrofractures, Field Scale
- 15:30 Session 4: Imaging and Inversion
- 17:45 Dinner Cruise Boston Harbor (Leave from MIT Sailing Pavilion) 21:00 Return to MIT



Applications

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- Water

Thursday's Agenda

- 09:00 Session 5: Seismology and Wave Propagation
- 10:40 Session 6: Geomechanics, Part 3 Hydrofractures at Laboratory Scale
- 11:50 Concluding Remarks: Brad Hager
- 12:00 Business Lunch
 Founding Member Sponsors
- 14:00 Meeting Adjourned

Thanks to Laurent Demanet for Program!



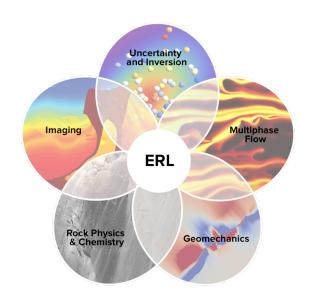
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Thank you!





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