Shale and Rock Mechanics
as Applied to Slopes, Tunnels, Mines and Hydrocarbon Extraction

Four 2-hour sessions

Each session will open with two keynote speakers followed by paper presentations. Themes are:
- Hydrocarbon Extraction
- Slopes
- Tunnels/Mines
- End of day debate: Shale is a Soft Rock - Not a Hard Soil.

Keynote Speakers and Debaters whose visions you will want to hear and discuss per topic:

**HYDROCARBON EXTRACTION**
- Senior Keynote: Mark Zoback, **Professor, Stanford University**
- Junior Keynote: Maria-Aikaterini Nikolainakou, **University of Texas**

**SLOPES**
- Senior Keynote: Doug Stead, **Professor, Simon Fraser University**
- Junior Keynote: Dave Scarpato, **Haley & Aldrich, Inc.**

**TUNNELS AND MINES**
- Senior Keynote: Derek Martin, **Professor, University of Alberta**
- Junior Keynote: Michael Murphy, **NIOSH/Office of Mine Safety and Health Research**

**DEBATE:** Shale is a Soft Rock - Not a Hard Soil. The debate will open with formal arguments by the debaters and will be followed by a town hall discussion. Debaters:
- Priscilla Nelson, **Professor, Colorado School of Mines**
- Maurice Dusseault, **Professor, University of Waterloo**
- Derek Elsworth, **Professor, Pennsylvania State University**
- Jean-Claude Roegiers, **Professor, University of Oklahoma**

Call for Papers

Authors are invited to submit abstracts at [www.isrm2015.com](http://www.isrm2015.com). Abstracts should not exceed 500 words and should state “SHALE SYMPOSIUM” as a header.

Accepted papers will be published in the Congress proceedings and selected papers will be orally presented at the Symposium.

**KEY DEADLINES** for this Symposium are different from the general congress deadlines. They are:
- Abstract Submittal: **June 30, 2014**
- Notification of acceptance: **September 15, 2014**
- Paper submittal: **November 30, 2014**

Symposium included with a full ISRM2015 Congress registration – or one-day registration fee to attend this symposium only.

For further information on the Shale Symposium please contact: **Herbert Einstein**
e-mail: einstein@mit.edu
or visit [www.isrm2015.com](http://www.isrm2015.com) and click on the Technical Program drop-down menu.