



Institute for Computational and Experimental Research in Mathematics

## IdeaLab for Early Career Researchers

### Inverse Problems and Uncertainty Quantification – July 6-10, 2015

**IdeaLab** is a one-week program aimed at early career researchers (within 5 years of their Ph.D.) that focuses on a topic at the frontier of research. Participants are exposed to a problem whose solution may require broad perspectives and multiple areas of expertise. Senior researchers introduce the research topic in tutorials and lead discussions. The participants break into teams to brainstorm ideas, comprehend the obstacles, and explore possible avenues towards a solution. The teams are encouraged to develop a research program proposal. On the last day, they present their ideas to one another and to a small panel of representatives from funding agencies for feedback and advice.

#### More About the Topic:

Inverse problems arise in an enormous variety of science and engineering applications. The goal of this IdeaLab is to lay out the fundamentals of uncertainty quantification for inverse problems in a relatively rapid but hands-on manner, so that participants can understand and fluently discuss the current state of the art.

#### Organizing Committee:

**Omar Ghattas**, University of Texas at Austin

**Youssef Marzouk**, MIT

**Noemi Petra**, University of California, Merced

#### Funding Includes:

- Travel support
- Six nights accommodations
- Meal allowance



**Program and participant details:**  
[\*\*icerm.brown.edu\*\*](http://icerm.brown.edu)

The IdeaLab selection committee will begin review on March 1, 2015. Applications will be accepted on a rolling basis through late spring 2015 or until all positions are filled, whichever comes first. ICERM encourages women and members of underrepresented minorities to apply.

**About ICERM:** The Institute for Computational and Experimental Research in Mathematics is a National Science Foundation Mathematics Institute at Brown University in Providence, RI.

