

# Strengthening Mathematics Education



Visit the Legacy Exhibit Booth Devoted to Student-Centered, Inquiry-Based Learning

 Join the Academy of Inquiry-Based Learning — the networking group of new and experienced IBL teachers offering support through mentoring, visiting speakers, and mini-grants.
www.inquirybasedlearning.org

 Meet volunteer Project NExT fellows and Moore students.

- Pick up free literature (in print and CD) on the Moore Method, and on Guided Discovery and Inquiry Based Learning.
- View extracts from Creativity in Mathematics, the video recommended by Keith Devlin (*Devlin's Angle,* February 2011). Produced by David Garrigus and available on YouTube.

Photos are from the 16<sup>th</sup> Annual Legacy of R.L. Moore Conference in Austin, TX, June 2013.

The next conference will be in Denver, CO, 19-21 June 2014. For further information please visit LegacyRLMoore.org/events.html or Legacy on Facebook.

#### Among the Many Interesting Presentations on the Program,

#### Some Relating Directly to Inquiry-Based Learning:

For additional presentations see www.LegacyRLMoore.org/events.html

Wednesday January 15, 2014

8:40am *A Modified-Moore Method in Precalculus* **Brad Bailey**, University of North Georgia Rm. 339, Baltimore Convention Center

9:40am The Sound of Mathematics: Pythagorean Music and Beyond Randall E. Cone, Virginia Military Institute

Rm. 338, Baltimore Convention Center

3:00pm Using Inquiry-Based Learning in Courses for Prospective Elementary Teachers Stan Yoshinobu, Cal Poly San Luis Obispo Rm. 347, Baltimore Convention Center

3:20pm *Effective Thinking and Mathematics* **Michael Starbird**, University of Texas at Austin Ballrooms I&II. 4<sup>th</sup> FI., Baltimore Convention Center

4:15pm Two sets of Moore-Method Analysis notes and two websites that support them William T. Mahavier, Lamar University Rm. 349, Baltimore Convention Center

4:55pm *Gently Introducing IBL in Advanced Calculus* **Robert W. Vallin**, Slippery Rock University Rm. 349, Baltimore Convention Center

## Thursday January 16, 2014

9:00 – 11:50am MAA Invited Paper Session on Mathematics and Effective Thinking, I

Edward Burger, Southwestern University; J. Michael Pearson, MAA; Stan Yoshinobu, Cal Poly San Luis Obispo; Jodi Cotten, Westchester Community College, Valhalla, NY; Sandra Laursen, University of Colorado Boulder; David Bressoud, Macalester College Rm. 307, Baltimore Convention Center

10:30am An IBL Approach to Advanced Calculus that Incorporates Proficiency Scott Beaver, Western Oregon University Rm. 348, Baltimore Convention Center

10:40am Successes and Failures of Inquiry-Based Learning in an Introduction to Proofs Course **Rachel Esselstein**, California State Univ. Monterey Bay Rm.339, Baltimore Convention Center

10:40am Holistic, Diagnostic Grading Rubric for Student Presentations in an IBL Geometry Course Nina Juliana White, University of Michigan Rm. 340, Baltimore Convention Center

11:00am How Important is the Final Answer? Using Inquiry-Based Learning in an Introductory Proofs Course **Susan Crook**, Loras College Rm. 339, Baltimore Convention Center Thursday, January 16, 2014 (Cont.)

11:20am Using an Inquiry-Based Learning Approach in Introduction to Proofs and Advanced Calculus Course **Jim Fulmer** and **Tom McMillan**, University of Arkansas at Little Rock Rm. 339, Baltimore Convention Center

1:00 – 4:00pm MAA Invited Paper Session on Mathematics and Effective Thinking, II Paul Zorn, St. Olaf College; Katherine Socha, Math for America; Deborah J. Bergstrand, Swarthmore College; Carol Schumacher, Kenyon College; Francis Edward Su, Harvey Mudd College Rm. 307, Baltimore Convention Center

,

## Friday, January 17, 2014

8:45am An Inquiry-Based Approach to Teaching Parameterization

Fabiana Cardetti, University of Connecticut; Nicole DeMatteo, Providence College; Jonathan Dollar, Emory University; Gabriel Feinberg, Haverford College Rm. 348, Baltimore Convention Center

1:00pm Group Work & Modified Moore Method in Flipping Calculus 1

Karen Bliss, Quinnipiac University Rm. 337, Baltimore Convention Center

2:40pm *Flipping Intermediate Algebra* Jacqueline A. Jensen-Vallin, Slippery Rock University Rm. 337, Baltimore Convention Center

## Saturday, January 18, 2014

2:00pm How About a Free Set of IBL Calculus Notes that Covers all of Calculus I, II and III? William T. Mahavier, Lamar University Rm. 340, Baltimore Convention Center

2:30pm Inquiry-Based Problem Solving Strategies through Interactive Approaches for Engaging Students in Mathematics Padmanabhan Seshaiyer and Jennifer Suh, George Mason University Rm. 314, Baltimore Convention Center

3:00pm Resources to Aid the Transition into an IBL Mathematics Course

**Gabriel Feinberg**, Haverford College; **Lily An**, Williams College; **Victoria Lewis**, California State University Sacramento; **Fabiana Cardetti**, University of Connecticut Rm. 347, Baltimore Convention Center

3:15pm Inquiry-Based Learning and Hybrid Inquiry-Based Learning in College Geometry Ali S. Shaqlaih, University of North Texas at Dallas Rm. 347, Baltimore Convention Center