Focus on Upper-Division Pathways
Baltimore, Maryland
June 14, 2017

This day-long meeting, designed to help inform TPSE implementation plans, brought together faculty members from some 15 colleges and universities who have done pioneering work relevant to upper-division math pathways; representatives of organizations whose employees require strong undergraduate math preparation; and professional association representatives.

Discussion centered around the need for innovation in mathematics and math-related curricula at the upper-division level, and how successful models can be evaluated, scaled up, and disseminated to other institutions.

Agenda

9:00-9:10  
Welcome and Introduction to TPSE Math  
Phillip Griffiths, IAS & TPSE Math

9:10-9:30  
The Upper-Division Pathways Initiative  
Mark Green, UCLA & TPSE Math

9:30-11:00  
Industry Panel on Workforce Demand in the Mathematical Sciences  
Moderator: Daniel Goroff, Alfred P. Sloan Foundation  
Panelists: Margaret Holen, Goldman Sachs & Co. (Retired)  
Charles Johnson-Bey, Lockheed Martin  
David Saltman, Center for Communications Research - Princeton  
Josh Sullivan, Booz Allen  
Arthur Szlam, Facebook AI Research

11:00-11:30: Break

11:30-12:00  
Discussion: Strategy for Collecting and Analyzing Data on Workforce Demand  
Moderator: Daniel Goroff

12:00-1:00  
Working Lunch: Informal discussion of successful pathways initiatives

1:00-1:30  
Association Presentations  
Moderator: Karen Saxe, AMS & TPSE Math  
AMS: Douglas Mupasiri, Chair, Committee on Education, AMS; University of Northern Iowa  
ASA: Donna LaLonde, Director, Strategic Initiatives and Outreach, ASA  
MAA: Michael Boardman, Chair, Cmte for the Undergrad Program in Math, MAA; Pacific Univ  
SIAM: Peter Turner, Fellow & former VP for Education, SIAM; Clarkson University
1:30-2:45
College/University Panel on Strategies for Creating Upper-Division Pathways
Moderator: Uri Treisman, Dana Center, UT Austin & TPSE Math
Panelists: Jeffrey Humpherys, Brigham Young University
            Peter Olver, University of Minnesota
            Suzanne Weekes, Worcester Polytechnic Institute
            Scott Wolpert, University of Maryland

2:45-3:15: Break

3:15-4:45
Facilitated Discussion: Implementation strategy for adaptation and scale-up of upper-division pathways;
Funding strategies
Moderator: Brit Kirwan, University System of Maryland & TPSE Math

4:45-5:00
Meeting wrap-up
Phillip Griffiths