



Mountain Regional Meeting on Upper-Division Math Pathways

Utah Valley University
Science Auditorium, SB 134
September 28-29, 2018

Objectives

Participants will:

- learn about jobs in industry, including implications for developing curricula, internships and mentorships, and undergraduate research opportunities;
- interact with representatives from industries in the Mountain Region, and learn how to create productive relationships with industry representatives to inform curricula and create industry opportunities for students;
- have the opportunity to design or revise an upper-division mathematics pathway to prepare students for careers in industry;
- Have the opportunity to become part of a TPSE-supported regional network of institutions working on upper-division pathways.

Agenda

Friday, September 28

12:00-1:00 **Registration;** sandwiches & mingling

PLENARY SESSION

1:00-1:45 **Welcome and Introductions**
Bob Palais, Math Department Chair, UVU
Jeffery Olson, Senior Vice President, UVU
Karen Saxe, Macalester College, AMS & TPSE – meeting emcee

About TPSE Math
Mark Green, UCLA & TPSE

What Are Upper-Division Pathways (UDPs) and why do they matter?
Uri Treisman, Dana Center & TPSE

1:45-2:45 **Industry Panel**
Michael Dorff, BYU – Moderator
Charles Cox, BioFire Diagnostics
Stephanie Fitchett, Transamerica
Marylesa Howard, Nevada National Security Site
Uwe Mayer, eBay
Eric Ringger, Zillow

- 2:45-3:00 **Break**
- 3:00-4:00 **Success Stories**
Tom Barr, AMS – Moderator
[PIC Math](#): *Elly Farnell, Colorado State*
[ACME](#): *Tyler Jarvis, BYU*
The Mathematical Biology program at the University of Utah: *Bob Palais, UVU*
- 4:00-4:15 **Break**
- 4:15-5:15 **Alumni Panel**
Eric Friedlander, USC & TPSE – Moderator
Addison Adams, UVU BS '19
Rebecca Jones, BYU BS '10, MS '13
Rachel Messick, BYU BS '12, MS '16
Dylan Zwick, U of Utah MS '08, PhD '12
- 5:45-8:30 **Reception and Dinner**
Sundance Mountain Resort, 8841 North Alpine Loop Road, Sundance UT 84604

Saturday, September 29

PLENARY SESSION

- 9:00-9:45 **What You Need to Know to Launch a UDP: Evidence from the Field**
Hal Salzman & Heather McKay, Rutgers
- 9:45-9:50 **Introduction to Breakouts**
Rebecca Hartzler, Dana Center

BREAKOUT SESSIONS

10:00-11:00 **Industry/Academia Breakout 1**

Participants not listed below are free to attend any of the three sessions.

Expert Group A: *Elly Farnell, Stephanie Fitchett, Tyler Jarvis, Eric Ringger* (facilitator: *Michael Dorff*) / Room 276

Theme 1: **Academia/Industry Interface**

Expert Group B: *Addison Adams, Marylesa Howard, Rebecca Jones, Rachel Messick* (facilitator: *Rebecca Hartzler*) / Room 279

Theme 2: **UDP Mathematics Content and Structures for Industry**

Expert Group C: *Uwe Mayer, Bob Palais, Tom Robbins, Dylan Zwick* (facilitator: *Tom Barr*) / Room 280

Theme 3: **Preparing Students for Careers in Industry**

- 11:00-11:15 **Break**

11:15-12:15 **Industry/Academia Breakout 2**

Participants may choose to interact with the same experts on a different theme, or with different experts on the same theme, or with different experts on a different theme.

Expert Group A / Room 276

Theme 2: **UDP Mathematics Content and Structures for Industry**

Expert Group B / Room 279

Theme 3: **Preparing Students for Careers in Industry**

Expert Group C / Room 280

Theme 1: **Academia/Industry Interface**

12:15-1:00 **Lunch** (Atrium)
with brief introduction to Pathways Working Sessions

1:00-2:45 **Pathways Working Sessions**

1. Room 263: Arizona State, BYU, Colorado State, U of Arizona, U of Northern Colorado, U of Utah – with *Fitchett, Ringger, Robbins*
2. Room 276: Clinton CC, Coconino CC, Salt Lake CC – with *Rachel Messick, Stina Nyhus Torruellas*
3. Room 279: Dixie State, Fort Lewis, U of Hawaii, Westminster, Whitman – with *Addison Adams, Dylan Zwick*
4. Room 280: Eastern Washington, UVU, Weber State, BYU-Idaho, Idaho State – with *Marylesa Howard, Rebecca Jones, Uwe Mayer*

(2:00-2:45) (Optional session: Organizational meeting for UDP Mountain Regional Network; 1 representative per participating institution) / Room 246

PLENARY SESSION

3:00-3:45 **Reflections from Funding Organizations**
Karen Saxe, Moderator
Elise Henson, Carnegie Corporation of New York
Lee Zia, NSF (EHR/DUE)

3:45-4:00 **Closing Remarks**
Phillip Griffiths