

NSF/CSDMS/CIG Coupling Surface and Tectonic Processes Workshop

– Final Agenda –

April 25–27, 2018

Wifi is available via UCB Guest or eduroam

Main Meeting Web Page: <https://csdms.colorado.edu/wiki/Form:Meetingconfirmation>

April 25 – Day 1 (Wednesday)

- 7:30 Shuttle Leaves Millennium Hotel**
- 7:45–8:30 Registration / Breakfast** (provided on site)
- 8:30–8:45 Intro/ Welcome** (Mark Behn)
- 8:45–10:15 Oral Session 1: Big questions** (convener: Greg Tucker)
- **Alison Duvall:** *From Earthquakes to Landscapes in the Cascadia Subduction Zone*
 - **Katy Barnhart:** *Testing landscape evolution models with natural and synthetic experiments*
- 10:15–10:30 Break**
- 10:30–11:45 Breakout Session 1: Questions:**
1. What are the outstanding questions / grand challenges in understanding the linkages between surface process and long term tectonics?
 2. What are the data needs required to address these questions?
 3. What are the modeling needs required to address these questions?
- 11:45–1:00 Lunch** (box lunches provided)
- 1:00–1:30 Summary of Breakout Session 1**
- 1:30–3:00 Oral Session 2a: Time & Length Scales** (convener: Luc Lavier)
- **Jean-Arthur Olive:** *Feedbacks between brittle deformation and surface processes: Insights from extensional settings*
 - **Phaedra Upton:** *Coupling geodynamics and surface processes*
- 3:00–3:30 Break**
- 3:30–4:15 Oral Session 2b: Time & Length Scales** (convener: Luc Lavier)
- **Jean Braun:** *Parameterizing Surface Processes and their Response to Tectonic and Climatic Forcing*
- 4:15–6:00 Posters** (snacks / beverages provided)
- 6:00 Shuttle leaves for Millennium Hotel**

- 7:00 Shuttle leaves Millennium Hotel for conference dinner
- 7:30–9:30 Conference Dinner (St. Julien Hotel, Xanadu Ballroom, 900 Walnut St, Boulder)
- 9:30 Shuttle returns to Millennium Hotel

April 26 – Day 2 (Thursday)

- 7:45 Shuttle Leaves Millennium Hotel
- 8:00–8:30 Breakfast (provided on site)
- 8:30–10:00 **Oral Session 3: *Implementation challenges*** (convener: Thorsten Becker)
- **Brain Yanites:** *Reconciling landscape models with reality: a spectrum of success*
 - **Louis Moresi:** *Quagmire - Algorithms and a Toolbox for Parallel Surface Process Codes*
- 10:00–10:30 Break
- 10:30–11:45 **Breakout Session 2:**
1. What are the challenges facing long-term tectonic models?
 2. What are the challenges facing surface process models?
 3. What are the key challenges in coupling long-term tectonic and surface process models?
- 11:45–1:00 Lunch (box lunches provided)
- 1:00–1:30 **Summary of Breakout Session 2**
- 1:30–3:00 **Oral Session 4: Numerical Techniques / Computational Challenges** (convener: Boris Kaus)
- **Mark Piper (CSDMS):** *Community cyberinfrastructure for modelling Earth-Surface processes*
 - **John Naliboff (CIG):** *Methods, challenges and uncertainty in modeling tectonic processes*
- 3:00–3:30 Break
- 3:30–4:45 **Round Table Discussion** (convener: Louise Kellogg)
- 4:45–5:00 **Concluding remarks**
- 5:30 Shuttle to Millennium Hotel
- Dinner on your own

April 27 – Day 3 (Friday)

- 9:00–12:00 Writing group convenes