

Telluride Science Research Conference, July 7 – 11, 2019

Polymer Physics

Organizers: Tim Lodge and M. Muthukumar

Sunday, July 7

5:00 - 6:30 pm Meet colleagues at the Oak, located at the base of the gondola, for a drink, register, and subsequent dinner at a nearby restaurant if desired. <http://www.oakstelluride.com/>

Monday, July 8

8:00 Breakfast at Telluride Intermediate School

8:30 Jay *Can a slip-link theory be coarse grained to a tube?*

9:15 Matt *Progress in the hunt for shear banding of entangled polymer solutions*

10:00 Break

10:30 Charles (I) *Recent developments in ring polymer dynamics*

11:15 David *Connecting whole-chain dynamics to segmental motion in glass-forming polymer melts and thin films: beyond the Rouse model*

7:30 Amalie *Structure and self-assembly of mixed brush nanoparticles*

8:15 Russ *Towards understanding metastable morphologies in polymer nanocomposites*

9:00 Rachel *Bioinspired polymers for understanding the role of monomer sequence and chain shape on self-assembly*

Tuesday, July 9

8:00 Breakfast at Telluride Intermediate School

8:30 Karen *Nanostructured ionic aggregates for proton and ion transport*

9:15 Tim *Phase behavior of ternary blends containing ions*

10:00 Break

10:30 Liangbin *Flow-induced crystallization of polymer: a shortcut of nucleation*

11:15 Lynn *Mechanics and flow behavior of solvent-swollen block copolymer micelle crystals*

6:30 *Using Nature's Blueprint to Build a Sustainable Energy Future*
Yogesh Surendranath, MIT

Telluride Conference Center in Mountain Village, with a cash bar starting at 6:00 pm.

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Wednesday, July 10

- 8:00 Breakfast at Telluride Intermediate School
- 8:30 Zahra *Evidence of a dynamical phase transition in glassy thin films*
- 9:15 Sanat *Phase transition concepts in the thin film glass problem*
- 10:00 Break
- 10:30 Rod *Measuring the local glass transition in copolymers*
- 11:15 Peter *Puzzles in the Mw dependence of polymer glasses*
- 6:00 TSRC Picnic/BBQ, location TBD

Thursday, July 11

- 8:00 Breakfast at Telluride Intermediate School
- 8:30 Muthu *Topologically frustrated new dynamical state of charged macromolecules*
- 9:15 Jiang *Polyelectrolyte molecules under steady and shearing condition*
- 10:00 Break
- 10:30 Charles (II) *Thermodynamics of coacervates with sequence-defined polyelectrolytes*
- 11:15 Michael *Structure and dynamics of coacervates formed by oppositely charged polyelectrolytes*
- 7:00 Pizza Party at Camel's Garden Hotel, TBD

Friday, July 11

- 8:00 Breakfast at Telluride Intermediate School (optional)
- 8:30 Optional group discussion, group hike, etc.

Tim Lodge: 612-802-5748

Muthu: 413-548-6143

TSRC Hosts: Mark Kozak, 970-708-4426, Cindy Fusting: 970-708-5069

Telluride Intermediate School
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