

Telluride Science Research Conference, June 26 – July 1, 2021

Polymer Physics

Organizers: Tim Lodge, M. Muthukumar, Rachel Segalman
All times MST

Saturday, June 26

5:00 - 6:30 pm Meet colleagues at the [Phoenix Bean](#), located at 221 Colorado, for a drink, register, and subsequent dinner at a nearby restaurant if desired.

Sunday, June 27

8:00 am “Grab & Go” breakfast items available in coffee break areas outside of classrooms

8:30 Arun *Machine learning phase diagrams* [Session chair: Tim]

9:15 Frank *Packing block copolymer-based micelles: What could be simpler?*

10:00 Break

10:30 Arthi *Understanding molecular driving forces for assembly and structure formation in polymer solutions using computational methods*

11:15 Vivek P. *Recent observations in liquid-liquid phase separation of oppositely-charged polyelectrolytes (VIRTUAL)*

7:30 pm Muthu *Transport of ions and polyelectrolytes* [Session chair: Sanat]

8:15 Rachel *Designing polymers for metal cation conduction*

9:00 Kingshuk *Polymer Physics of Disordered Proteins Reveals Biological Insights (VIRTUAL)*

Monday, June 28

8:00 am “Grab & Go” breakfast items available in coffee break areas outside of classrooms

8:30 Ken *The Effect of Strong Attractions on the Dynamics and Viscoelasticity of Dense Polymer Liquids: From Nanocomposites to Associating Copolymers* [Session chair: Brad]

9:15 Mike *Analysis of Grafted Polymer Dynamics with Core-Modified DPD Simulations*

10:00 Break

10:30 Jacinta *Dispersity and dispersion: adventures in particle-polymer interactions (VIRTUAL)*

11:15 Andy *Impact of chain relaxation and environmental fluctuations on polymer dynamics (VIRTUAL)*

7:30 pm Sanat *Modeling Polymer Crystallization Near Moving Sinks* [Session chair: Rachel]

8:15 Chinedum *Assembly and Phase Behavior of Liquid Crystal Block Copolymers in Nematic Solvents*

9:00 Sarah *Polymeric materials and methods to interrogate emergent multicellular behavior (VIRTUAL)*

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Tuesday, June 29

- 8:00 am “Grab & Go” breakfast items available in coffee break areas outside of classrooms
- 8:30 Zhen-Gang *Bubble Nucleation in CO₂–Polymer Mixtures* [Session chair: Muthu]
- 9:15 Lynn *Relationship between nanoscale structure and transport properties of block copolymer micelle solutions*
- 10:00 Break
- 10:30 Tim *Fragmentation of block copolymer micelles*
- 11:15 Jian *Looping-in complexation in non-stoichiometric polyelectrolyte mixtures* (VIRTUAL)
- 6:30 pm *Telluride Town Talk: Telluride Transfer Warehouse, 201 S Fir St., Telluride CO*

Wednesday, June 30

- 8:00 am “Grab & Go” breakfast items available in coffee break areas outside of classrooms
- 8:30 Vivek S *Stretched Polymer Dynamics and Extensional Rheology, in a Pinch* [Session chair: Lynn]
- 9:15 Brad *The Mathematical Structure and Representation of Polymerization*
- 10:00 Break
- 10:30 Bryan *Is There Anything Radical about the Physics of Open-Shell Macromolecules?*
- 11:15 *cancelled*
- 5:30 - 7:30 pm TSRC Picnic/BBQ, location: tent behind the Intermediate School

Thursday, July 1

- 8:00 am “Grab & Go” breakfast items available in coffee break areas outside of classrooms
- 8:30 Optional group discussion, group hike, etc.

Coordinates: Tim Lodge: 612-802-5748
Muthu: 413-548-6143
Rachel: 510-684-6572
TSRC Hosts: Mark Kozak, 970-708-4426, Cindy Fusting: 970-708-5069
TSRC Lodging & Registration: Sara Friedberg, 970-708-0622

In-person: Telluride Intermediate School
725 W Colorado Ave Telluride CO 81435

