

# Geometers of Soft Materials Symposium

**Location:** Wu and Chen Auditorium (Room 101 Levine Hall, 3330 Walnut Street)

**Details & abstracts** are available at <https://randyfest.lol/> QR Code →



## Day 1: Thursday, March 12, 2026

8:30 am *Check-in*

9 am **Welcome & introductory remarks**

Arjun Yodh, Chair of University of Pennsylvania Department of Physics & Astronomy  
Greg Grason (UMass Amherst) & Suman Kulkarni

### Session I

9:20 am Emmanuelle Lacaze, Sorbonne University

**“Dynamics of nanoparticles within liquid crystal topological defects”**

10:00 am Einav Berin, Weizmann Institute of Science

**“Inverse Design of Tightly-Woven Smart Fabrics”**

10:25 am Lisa Tran, Utrecht University

**“Controlling defects in molecular and colloidal liquid crystals”**

10:50 am *Break*

### Session II

11:05am Oleg Lavrentovich, Kent State University

**“Polarization patterns of ferroelectric nematics”**

11:45 am Max Lavrentovich, Worcester State University

**“Striped patterns and droplet nucleation in liquid crystals: Effects of elastic anisotropy and imposed defects”**

12:10 pm Helen Ansell, Emory University

**“Curvature-induced localization of phase-separated active Brownian particles”**

12:35 pm *Lunch*

2:00 pm *Symposium photo*

### Session III

2:30 pm Sharon Glotzer, University of Michigan

**“The Shapes of Things to Come”**

3:10 pm Matej Krajnc, Jožef Stefan Institute

**“How 3D cell geometry controls tissue rigidity and shape”**

3:35 pm Alvin Modin, ETH Zürich  
**“Cable management: crafting tunable topological defect line architecture by photo-alignment of nematic liquid crystals”**

4:00 pm *Close of Day 1 sessions*

## **Day 2: Friday, March 13, 2026**

8:30 am *Check-in*

### **Session IV**

9:00 am David Nelson, Harvard University  
**“Defect emission and absorption for liquid crystals on cones”**

9:40 am Mike Dimitriyev, Texas A&M University  
**“Symmetry and packing of intercatenated materials”**

10:05 am Xinyu Wang, University of Michigan  
**“Topology-driven versatile design and collective dynamics in nematic liquid crystals”**

10:25 am *Break*

### **Session V**

10:40 am Mark Dennis, University of Birmingham  
**“Softness Without Matter”**

11:20 am Cody Schmiming, Johns Hopkins University  
**“Geometry from Topology: Defect Densities in Three-Dimensional Nematic Liquid Crystals”**

11:45 am Marcelo Dias, University of Edinburgh  
**“Fracture, by design: topology-programmed damage in Maxwell lattices”**

12:10 pm *Lunch*

### **Session VI**

1:30 pm Teresa Lopez-Leon, ESPCI Paris  
**“What constraints make possible”**

2:10 pm Enej Caf, University of Warwick & University of Ljubljana  
**“Spontaneous Flow and Non-singular Topological Defects in 3D Active Nematics”**

2:35 pm Szabolcs Horvat, Reykjavik University  
**“Characterizing spatial networks through proximity graphs”**

3:00 pm **Closing remarks**