

Complex Fluids Design Consortium Annual Meeting

Tuesday, January 29, 2019

Materials Research Laboratory, Room 2053
University of California, Santa Barbara

- 8:30-9:00 am *CFDC: Welcome and update*
Professor Glenn Fredrickson, Director CFDC, Chemical Engineering and Materials, UCSB
- 9:00-9:15 am *CFDC software update: PolyFTS*
Dr. Kris Delaney, MRL, UCSB
- 9:15-9:45 am *Spectral contour methods for highly accurate and memory efficient polymer SCFT*
Professor Hector Cenicerros, Mathematics, UCSB
- 9:45- 10:15 pm *Modeling phase separation dynamics in polymeric fluids*
Professor Doug Tree, Chemical Engineering, Brigham Young University
- 10:15-10:30 am **Coffee Break 1**
- 10:30-11:00 am *Arrested mobility effects on the spinodal decomposition of ternary polymer solutions*
Jan Garcia, Chemical Engineering and MRL, UCSB
- 11:00-11:30 am *Reactive blending of a symmetric polymer blend*
Dr. Mukul Tikekar, MRL, UCSB
- 11:30-12:00 pm *Progress in fully fluctuating field-theoretic simulation methods*
Dr. Kris Delaney, MRL, UCSB
- 12:00-1:00 pm **Lunch on MRL 3rd Floor Patio**
- 1:00-1:30 pm *Correlation effects in the dielectric response of charge-containing polarizable and dipolar fluids*
Dr. Doug Grzetic, MRL, UCSB

- 1:30-2:00 pm *Electric field-induced critical point shift in a binary dielectric fluid*
Jonathan Martin, Chemical Engineering and MRL, UCSB
- 2:00-2:30 pm *Application of fully-fluctuating field theoretic simulations to study liquid-liquid phase separation in biology*
Dr. James McCarty, Chemistry & Biochemistry, UCSB
- 2:30-3:00 pm *Using particle swarm optimization and SCFT to agnostically identify the stable and competitive morphologies of block copolymers*
Dr. Carol Tsai, Chemistry and Biochemistry and MRL, UCSB
- 3:00-3:15 pm **Coffee Break 2**
- 3:15-3:45 pm *Architecture and asymmetry in block polymer self-assembly*
Dr. Joshua Lequieu, MRL, UCSB
- 3:45-4:15 pm *Integrating particle and field-theoretic simulations:
A multiscale approach to complex polymeric solutions*
Nicholas Sherck, Chemical Engineering, UCSB
- 4:15-4:45 pm *Developing coarse grained models of charged systems*
Dr. Kevin Shen, MRL, UCSB
- 4:45-5:15 pm *Coherent states field theory simulations for supramolecular multiblock copolymers*
Daniel Vigil, Chemical Engineering and MRL, UCSB
- 5:15-5:45 pm *Simultaneous transient gel behavior and multivalent ionic mobility in polymeric ionic liquid-ligand gels*
Seamus Jones, Chemical Engineering and MRL, UCSB
- 6:00 pm Adjourn CFDC meeting

CFDC Dinner – 6:30 pm, Flavor of India