TSRC Workshop on **Hydrophobicity: From Theory, Simulation, to Experiment**

Organizers: Ruhong Zhu and Shekhar Garde

**PROGRAM SCHEDULE**

Telluride Intermediate School, 725 W. Colorado Ave, Telluride CO 81435

***Monday, June 11th, 2012*** *Hydrophobic Hydration/Crossover*

5:00PM-6:00 PM Registration Check-in at Telluride Intermediate School, 725 West Colorado

6:00PM-7:00PM **Valeria Molinero**

Capturing hydrophobic hydration in a coarse-grained model of water

7:00PM-8:00PM **Rick Remsing**

Dissecting Hydrophobic Solvation from Small to Large Length Scales

8:00PM-8:15PM **Break**

8:15PM-9:15PM **Gilbert Walker**

Single Polymer Studies of Hydrophobic Hydration

***Tuesday, June 12th, 2012*** *Physical systems*

7:30AM-9:00AM Breakfast at the meeting site

9:00AM-10:00AM **Robert Matthews**

Hydration, Hydrophobicity and Folding: Experimental Approaches and Computational Challenges

10:00AM-11:00AM **Pablo Debenedetti**

Thermodynamics and Kinetics of Capillary Evaporation in Hydrophobic Confinement

11:00AM-11:20AM Break

11:20AM-12:20PM **Alenka Luzar** Tunable hydration

**FREE TIME**

7:00PM-8:00PM **Dor Ben-Amotz**

Water Structural Transformation at Molecular Hydrophobic Interfaces

8:00PM-9:00PM **Anders Nilsson**

Probing hydrophobicity both in solutions and on surfaces using x-rays

***Wednesday, June 13th, 2012*** *Biological Systems*

7:30AM-9:00AM Breakfast at the meeting site

9:00AM-10:00AM **Regis Pomes**

Emerging roles for the hydrophobic effect in biomolecular function: ion transport and tissue elasticity

10:00AM-11:00AM **Lauren Kapcha**

Characterizing the hydrophobicity and topography of protein surfaces at sub-amino acid resolution

11:00AM-11:20AM Break

11:20AM-12:20PM **Ruhong Zhou**

Urea (and GdmCl)’s Action on Hydrophobic Interactions in both Physical and Biological Systems

**FREE TIME**

7:00PM-8:00PM **Feng Gai**

Using an unnatural amino acid to probe how urea and TMAO affect the hydrophobicity of water

8:00PM-9:00PM **Amish Patel**

Uncovering the Role of Water in Biomolecular Interactions: New Insights from Theory and Computation

***Thursday, June 14th, 2012*** *Interfaces*

7:30AM-9:00AM Breakfast at the meeting site

9:00AM-10:00AM **Alberto Striolo**

Hydrophobic and Hydrophilic Interfaces: Static and Dynamic Contact Angles to Predict Hydrodynamic Slip

10:00PM-11:00AM **Jeetain Mittal**

Fundamental Characteristics of Water Flow Through Nanotubes

11:00AM-11:20AM Break

11:20AM-12:20PM **Fang Haiping**

Hydrophobic Behavior of the Solid Surfaces with Charge Dipoles at Room Temperatures

6:00PM-9:00PM TSRC Picnic, families members and other TSRC guests welcome free of charge

***Friday, June 15th, 2012***

7:30AM-9:00AM Breakfast at the meeting site

9:00AM-10:00AM **Patrick Varilly**

Searching for hydophobicity in unexpected places

10:00PM-11:00AM **Shekhar Garde**

Quantifying water-mediated interactions at Interfaces

11:00AM-12:00PM **Guo Wei**

TBA