Dynamics of Molecular Collisions 2013 Schedule

Sunday, July 7

Arrival and Registration

4:00 - 6:00 pm, Registration, Mountain-Lake Room
6:00 - 7:30 pm, Dinner, Garden Deck
7:30 - 10:00 pm, Reception, Garden Deck

Monday, July 8

7:30 - 8:30: Breakfast, Granhall

Bimolecular Reactions I, Mountain-Lake Room

8:30 - 8:45: Session Overview: Kopin Liu (Academia Sinica)
8:45 - 9:15: David Clary (U. Oxford), Combining Quantum Dynamics and Quantum Chemistry for Reactions of Polyatomic Molecules
9:15 - 9:25: Discussion
9:55 - 10:05: Discussion
10:05 - 10:50: Coffee break
11:20 - 11:30: Discussion
11:30 - 11:45: Contributing talk: Baptiste Joalland (Wayne State U.), Crossed-beam Slice Imaging of Cl Reaction Dynamics with Butene Isomers
11:45 - 11:50: Discussion
11:50 - 12:20: Zhigang Sun (Dalian Institute of Chemical Physics), State-to-state Reactive Scattering by MCTDH Method
12:20 - 12:30: Discussion
12:30 - 2:00: Lunch, Garden Deck
2:00 - 4:30: Free (set up posters, odd numbers)
4:30 - 5:30: Poster Session (odd numbers), Bay Room
5:30 - 7:00: Dinner, Garden Deck

Non-adiabatic Dynamics, Mountain-Lake Room

7:00 - 7:15: Session Overview, Spiridoula Matsika (Temple U.)
7:15 - 7:45: David Yarkony (Johns Hopkins U.), Electronic Structure Aspects of Nonadiabatic Dynamics: Reaction Mechanisms and Representations of Coupled Adiabatic States
7:45 - 7:55: Discussion
7:55 - 8:25:  John Tully (Yale U.), Chemical Dynamics at Metal Surfaces: The Role of Electronic Excitations
8:25 - 8:35:  Discussion
8:35 - 8:50:  Break
8:50 - 9:05:  Contributing talk, J. Jankunas (Stanford U.), Simultaneous Measurement of Reactive and Inelastic Scattering of H + HD → HD(v', j') + H Reaction: In Search for Geometric Phase Effects
9:05 - 9:10:  Discussion
9:10 - 9:40:  Anna Krylov (U. Southern California), On the Photodetachment from the Green Fluorescent Protein Chromophore
9:40 - 9:50:  Discussion
9:50 - 12:00:  Poster session (odd numbers), Bay Room

**Tuesday, July 9**

7:30 - 8:30:  Breakfast, Granhall

**Unimolecular Reactions, Mountain-Lake Room**

8:30 - 8:45:  Session Overview: Wen Li (Wayne State U.)
8:45 - 9:15:  Don Truhlar (U. Minnesota), Photochemistry in Terms of Diabatic States
9:15 - 9:25:  Discussion
9:25 - 9:55:  Dan Neumark (U. California Berkeley), Probing Chemical Dynamics with Negative Ions
9:55 - 10:05:  Discussion
10:05 - 10:50:  Coffee break
10:50 - 11:20:  Andrei Sanov (U. Arizona), Radical and Diradical Reactive Intermediates via Anion Photoelectron Imaging
11:20 - 11:30:  Discussion
11:30 - 11:45:  Contributing talk: Michael Lucas (U. California Riverside), Ultraviolet Photodissociation Dynamics of the Cyclohexyl Radical
11:45 - 11:50:  Discussion
11:50 - 12:20:  Bob Continetti (U. California San Diego), Studies of Neutral Reaction Dynamics using Dissociative Photodetachment: HCO₂ and F + H₂O → HF + OH
12:20 - 12:30:  Discussion

12:30 - 2:00:  Lunch, Garden Deck
2:00 - 4:30:  Free
4:30 - 5:30:  Poster Session (odd numbers), Bay Room
5:30 - 7:00:  Dinner, Garden Deck

**Cold Collisions, Mountain-Lake Room**

7:00 - 7:15:  Session Overview: Stefan Willitsch (U. Basel)
7:15 - 7:45:  Pascal Honvault (U. Franche-Comté), Quantum Reaction Dynamics Studies of Astrophysical Interest below 100 K
7:45 - 7:55: Discussion
7:55 - 8:25: Bas van de Meerakker (Radboud U.), Controlling Collisions using Stark-decelerated Molecular Beams
8:25 - 8:35: Discussion
8:35 - 8:50: Break
8:50 - 9:05: Contributing talk, Heather Lewandowski (JILA), Travelling-Wave Deceleration of Buffer-Gas Beams of CH
9:05 - 9:10: Discussion
9:40 - 9:50: Discussion
9:50 - 12:00: Poster session (odd numbers)

Wednesday, July 10

7:30 - 8:30: Breakfast, Granhall

Interface Dynamics, Mountain-Lake Room

8:30 - 8:45: Session Overview: Rainer Beck (EPF Lausanne)
8:45 - 9:15: David Nesbitt (JILA/U. Colorado), Probing Gas-Liquid and Gas-SAM Interfaces with Quantum State Resolved Collision Dynamics
9:15 - 9:25: Discussion
9:55 - 10:05: Discussion
10:05 - 10:50: Coffee break
11:20 - 11:30: Discussion
11:30 - 11:45: Contributing talk: Bin Jiang (U. New Mexico), Mode/Bond Selectivity in Methane Dissociative Chemisorption on Ni(111)
11:45 - 11:50: Discussion
11:50 - 12:20: Geert-Jan Kroes (Leiden U.), Towards a Chemically Accurate Description of Reactive Molecule-surface Scattering
12:20 - 12:30: Discussion
12:30 - 2:00: Lunch, Garden Deck
2:00 - 4:30: Free (set up posters, even numbers), Bay Room
4:30 - 5:30: Poster Session (even numbers), Bay Room
5:30 - 7:00: Dinner, Garden Deck
Bimolecular Reactions II, Mountain-Lake Room

7:00 - 7:15: Session Overview: Al Wagner (Argonne National Lab)
7:15 - 7:45: Bill Hase (Texas Tech U.), Simulations of X + CH_3Y Ion-Molecule Reactions. Roles of Non-Statistical Dynamics, Multiple Reaction Pathways, and Microsolvation
7:45 - 7:55: Discussion
8:25 - 8:35: Discussion
8:35 - 8:50: Break
8:50 - 9:05: Contributing talk, Gábor Czakó (Eötvös U.) Dynamics of Bimolecular Polyatomic Reactions on Ab Initio Potential Energy Surfaces
9:05 - 9:10: Discussion
9:10 - 9:40: Uwe Manthe (U. Bielefeld), Quantum Dynamics of Methane-Atom Reactions
9:40 - 9:50: Discussion
9:50 - 12:00: Poster session (even numbers), Bay Room

Thursday, July 11

7:30 - 8:30: Breakfast, Granhall

Clusters and Solution Reactions, Mountain-Lake Room

8:30 - 8:45: Session Overview: Marsha Lester (U. Pennsylvania)
8:45 - 9:15: Andrew Orr-Ewing (U. Bristol), Vibrationally Resolved Dynamics and Energy Flow for Reactions in Solution
9:15 - 9:25: Discussion
9:55 - 10:05: Discussion
10:05 - 10:50: Coffee break
10:50 - 11:20: Fleming Crim (U. Wisconsin Madison) Dissociation and Isomerization in Clusters and Solution
11:20 - 11:30: Discussion
11:30 - 11:45: Contributing talk: Diane Lancaster (U. Wisconsin Madison), Inert Gas Scattering from Liquid Hydrocarbon Microjets
11:45 - 11:50: Discussion
11:50 - 12:20: Tim Zwier (Purdue U.) Multiple Resonance Methods for Conformation-Specific Spectroscopy and Dynamics
12:20 - 12:30: Discussion
12:30 - 2:00: Lunch, Garden Deck
2:00 - 4:30: Free
4:30 - 5:30: Poster Session (even numbers), Bay Room
5:30 - 7:00: Dinner, Garden Deck
Award Session, Mountain-Lake Room

7:00 - 7:10: Introduction: *Dave Chandler* (Sandia National Lab), *Arthur Suits* (Wayne State U.) and *Hua Guo* (U. New Mexico)
7:10 - 7:50: *Giacinto Scoles* (U. Udine), Chemical Dynamics of Complex Reactions with Biomolecules: the Case of Restriction Enzymes in Highly Packed DNA Brushes
7:50 - 8:00: Discussion
8:00 - 8:40 *Peter Toennies* (MPI Göttingen), Superfluid Helium Droplets: Some New Results and Insight.
8:40 - 8:50: Discussion
8:50 - 9:30: *Joel Bowman* (Emory U.), Potential Energy Surfaces
9:30 - 9:40: Discussion
9:40 - 12:00: Poster session (even numbers), Bay Room

Friday, July 12

7:30 - 8:30: Breakfast, Granhall

Atmospheric, Astrochemical, and Combustion Reactions, Mountain-Lake Room

8:30 - 8:45: Session Overview: *Richard Dawes* (Missouri U. Sci. Tech.)
8:45 - 9:15: *Ralf Kaiser* (U. Hawaii Manoa), On the Formation of Interstellar Organo Silicon Molecules
9:15 - 9:25: Discussion
9:55 - 10:05: Discussion
10:05 - 10:50: Coffee break
11:20 - 11:30: Discussion
11:30 - 11:45: Contributing talk: *Julia Lehman* (U. Pennsylvania), Photodissociation Dynamics of the Simplest Criegee Intermediate CH$_2$OO and its Laboratory Precursor CH$_2$I$_2$
11:45 - 11:50: Discussion
12:20 - 12:30: Discussion
12:30 - 1:30: Lunch, Garden Deck
1:30: Conference adjourns