***Spectroscopy and Dynamics on Multiple Potential Energy Surfaces***

*Organizers: Michael Heaven, Anne McCoy, Scott Reid, Trevor Sears*

*Location: Telluride Intermediate School, 725 W. Colorado Ave, Telluride CO 81435*

*TSRC Hosts: Nana Naisbitt 970-708-0004 and Rory Sullivan 970-708-4542*

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**Note:** Talk duration includes 10 min discussion

**Sunday, July 7th**

6:00 – 8:00 pm Informal Meet and Greet at the Arroyo Wine Bar and Gallery, 220 E Colorado Avenue, Cash Bar

**Monday, July 7th**

MORNING: Scott Reid, Chair

7:45 Breakfast at TSRC

8:15 announcements

8:20 Anne McCoy, “ *Non-adiabatic effects in the photodissociation dynamics of BrCN-: The role of CN rotation in product branching*”

8:55 Craig Murray, “*Velocity-map ion imaging studies of non-conventional photodissociation dynamics of CH3SH*”

9:30 Jingsong Zhang, “*Photodissociation of cyclic and aromatic free radicals*”

10:05 BREAK

10:35 Richard Dawes, “*Construction of multistate potential energy surfaces for spectroscopy and dynamics*”

11:10 Stephen Bradforth, “*Solvent role on surface hopping & mode-specific energy dissipation: connecting ultrafast reaction dynamics in the gas and liquid phase*”

11:45 Mathias Weber, “*Anionic Transition Metal Complexes with CO2*”

12:20 End

EVENING: Michael Heaven, Chair

7:00 Terry Miller, “*The Spectroscopy of Reactive Chemical Intermediates in Degenerate Electronic States*”

7:35 John Stanton, “*Jahn-Teller Vibronic Hamiltonians:  Linear, Quadratic and Quartic.   And, of course, NO3*”

8:10 Jinjun Liu, ‘’*Rotational and Fine Structure of Molecules in Nearly Degenerate Electronic States*”

8:45 End

**Tuesday, July 8th**

AFTERNOON: Trevor Sears, Chair

1:15 Announcements

1:20 John Herbert, “*Low-cost DFT-based methods for locating and describing conical intersections*”

1:55 Paul Dagdigian, “*Theoretical investigation of the dynamics of collisional electronic quenching*”

2:30 Tim Steimle, “*Intersystem Crossing as illuminated by Optical Zeeman Spectroscopy: Si3 and SO2*”

3:05 BREAK

3:35 Millard Alexander, “*Visualizing non-adiabatic transitions in simple chemical reactions*”

4:10 Greg Hall, “*Double-resonance kinetic studies of CN(X) collisions*”

4:45 end

6:00 Town Talk, Telluride Conference Center, Mountain Village

**Wednesday, July 9th**

AFTERNOON: Anne McCoy, Chair

1:30 Bob Continetti, “*Imaging the Dynamics of Chemical Reactions Using Coincidence Spectroscopy*”

2:05 Spiridoula Matsika, “TBA”

2:40 Mitchio Okumura, “*Applications of Frequency Comb Lasers for Free Radical Spectroscopy and Kinetics: HOCO/DOCO and All That Stuff* ”

3:15 BREAK

3:40 Chris Elles, “*Ultrafast dynamics in the higher excited states of a photochromic molecule: One- and two-photon excitation above S1*”

4:15 Ryan Steele, “*New Ab Initio Approaches to Spectroscopy and Dynamics*”

4:50 David Osborn, “*Sorting out the intersystem crossing dynamics in the O(3P) + propyne reaction*”

5:30 end

6:00 Picnic, Ah Haa School for the Arts, 300 S. Townsend, Telluride

**Thursday, July 10th**

AFTERNOON: Richard Dawes, Chair

1:15 announcements

1:20 Gary Douberly, “*Infrared Rovibrational Spectroscopy of OH-C2H2 in 4He Nanodroplets: Parity Splittings due to Partially Quenched Electronic Angular Momentum*”

1:55 Anna Krylov, “TBA”

2:30 Michael Duncan, “*Infrared spectroscopy of small organic cations*”

3:05 Break

3:30 Etienne Garand, “*Structure of water oxidation catalysts and reaction intermediates via cryogenic ion*

 *spectroscopy*”

4:05 Francesco Evangelista, “*Adaptive quantum chemistry methods for ground and excited electronic states*”

4:40 Timothy Schmidt, “*The higher-lying states of resonance-stabilized radicals and some musings on the electronic structure of molecules*”

5:30 end

EVENING: Jinjun Liu, Chair

7:30 announcements

7:35 Kirk Peterson, “*Towards accurate ab initio spectroscopy of molecules containing heavy elements*”

8:10 Michael Heaven, “*Are single reference methods adequate for actinide bonds?*”

8:45 Curt Wittig, “TBA”

9:20 end

**Friday, July 11th**

MORNING: Ryan Steele, Chair

7:45 Breakfast at TSRC

8:20 announcements

8:30 Scott Kable, “*Photochemistry, photophysics and phototautomerization of small carbonyl compounds*”

9:05 Ksenia Bravaya, “*Energies and lifetimes of autoionizing electronic states: EOM-CCSD suite of methods”*

9:40Scott Reid, “*Spectroscopic Probes of Exciton Dynamics in Multichromophoric Systems*”

10:15 BREAK

10:45 Ken McKendrick, “*Dynamics on Multiple Real (Liquid) Surfaces*”

11:20 Trevor Sears, “*Update on Phenylacetylene and free radical dynamics*”

11:55 Wrapup