**Monday, June 26, 2017**

7:45-8:05 Breakfast

8:05-8:15 Welcome and Opening Remarks (Organizers)

***Topic: Spin Orbit Coupling 1 – Chair: John Mitchell***

8:15-8:45 Mark Lumsden — *Kitaev quantum spin liquid response in -RuCl3*

8:45-9:15 Hidenori Takagi — *Topological quantum spin liquid – ‘Zen’ world*

9:15-9:45 Laurent Chapon — *Spin fragmentation in pyrochlore iridates*

9:45-10:15 George Jackeli — *Spin-orbital interplay in cubic double perovskites*

10:15-10:45 Coffee Break

***Topic: Complex Oxide Theory and Materials Design – Chair: Sang Cheong***

10:45-11:15 Daniil Khomskii — *Self-doping, skipped valence and all that, or how to make magnetic gold*

11:15-11:45 Lucile Savary — *High temperature thermal conductivity in complex magnets*

11:45-12:15 James Rondinelli — *Polar metals: design challenges and opportunities*

Afternoon Free

7:00 – 9:00 Evening Discussion, Topic TBD

**Tuesday, June 27, 2016**

7:45-8:15 Breakfast

***Topic: Complex Oxide Films 1 – Chair: Andy Christianson***

8:15-8:45 Charles Ahn — *The materials physics of complex oxide heterostructures*

8:45-9:15 Mike Fitzsimmons — *Routes to synthetic magnetoelectric coupling across interfac*es

9:15-9:45 Susanne Stemmer — *Metal-insulator transitions in correlated two-dimensional electron liquids*

9:45-10:15 Steve May — *Tailoring properties in ferrite perovskite heterostructures*

10:15-10:45 Coffee Break

***Topic: Complex Oxide Films 2 - Chair: Simon Billinge***

10:45-11:15 Anand Bhattacharya — *Spin currents as a probe of magnetic excitations in paramagnetic and antiferromagnetic insulators*

11:15-11:45 Peter Littlewood — *Elastic interactions and control of the Mott transition*

Afternoon Free

6:00 – 7:00 TSRC Town Talk

7:00 – No Host Dinner (location TBD)

**Wednesday, June 28, 2016**

7:45-8:15 Breakfast

***Topic: Frustration and Quantum Spin Liquids – Chair: Mike Norman***

8:15-8:45 Roser Valenti — *Challenges in designing exotic quantum spin liquid materials*

8:45-9:15 Martin Mourigal — *Spin-liquid candidates in novel triangular and kagome rare-earth oxides*

9:15-9:45 Yong-Baek Kim — *Quantum spin liquid and anomalous spin Hall effect in correlated materials with strong spin-orbit coupling*

9:45-10:15 Tyrel McQueen — *Doping and topology in frustrated magnets*

10:15-10:45 Coffee Break

***Topic: Orbital and Charge Degrees of Freedom – Chair: Jaime Fernandez-Baca***

10:45-11:15 Simon Billinge — *Orbital degeneracy lifting, broken local symmetries and properties in correlated electron materials*

11:15-11:45 Haidan Wen — *Correlating electronic and structural degrees of freedom in space and time*

Afternoon Free

6:00-8:00 TSRC Picnic, Telluride Intermediate School, 725 W. Colorado Ave

**Thursday, June 29, 2017**

7:45-8:15 Breakfast

***Topic: Multiferroics and Magnetoelectrics – Chair: Daniil Khomskii***

8:15-8:45 Jaime Fernandez-Baca — *Soft electronic phases in a molecular multiferroic*

8:45-9:15 Sang Cheong — *Hybrid improper ferroelectricity or domain topology of quantum materials*

9:15-9:45 Marisa Medarde — *Design of room temperature spiral multiferroics with layered perovskite structure*

9:45-10:15: Tsyuoshi Kimura — *How to embed magnetoelectric multi-spin variables in complex transition-metal compounds*

10:15-10:45 Coffee Break

***Topic: Spin Orbit Coupling 2 – Chair: Susanne Stemmer***

10:45-11:15 Stuart Calder — *Insights into competing interactions in magnetic osmates and iridates through neutron and resonant x-ray scattering*

11:15-11:45 Andy Christianson — *Spin-orbit coupling and the magnetic properties of osmium-based double perovskites*

11:45-12:15 Mike Norman — *What is the order parameter of Cd2Re2O7?*

Afternoon Free

7:00 – 9:00 Evening Discussion (Topic TBD)

**Friday June 30, 2017**

7:45-8:15 Breakfast

***Topic: Cuprates and Nickelates – Chair: Charles Ahn***

8:15-8:45 Mark Dean — *Precursor Charge Density Waves in La2-xBaxCuO4*

8:45-9:15: Liuyan Zhao — *An inversion-symmetry-broken order inside the pseudogap region of a cuprate revealed by optical second harmonic generation*

9:15-9:45 Robert Kaindl — *Ultrafast dynamics of Interactions and emergent order in stripe-phase nickelates*

9:45-10:15 John Mitchell — *Highly reduced nickelates: marching ever closer to cuprates*

10:15-10:45 Coffee Break

***Topic: Spin-Orbit Coupling 3 and Spin Liquids – Chair: Anand Bhattacharya***

10:45-11:15 Pat Woodward **—** *Exploring the magnetism of double perovskites containing 5d1 and 5d2 ions*

11:15-11:45 Gang Cao — *The promise of spin-orbit interactions: novel materials with novel properties for novel devices*

11:45-12:15 Christian Batista — *Chiral liquid phase near a quantum critical point*

12:15-12:30 Closing Remarks (Organizers)