## Sunday, June 5th

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| 5:00 – 6:30 | | All-TSRC Meet-and-Greet at *Phoenix Bean* |

## Monday, June 6th

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| 7:30 – 8:30 | **Breakfast (provided by TSRC)** | |
| 9:00 – 9:10 | Welcome: Jennifer Hollingsworth | |

**Chair: Jennifer Hollingsworth**

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| 9:10 – 10:00 | Ryan Hadt | Connecting molecular electronic structure and electron spin relaxation for quantum information science |
| 10:00 – 10:50 | Selvan Demir | Employing electronic spins for single-molecule magnet and qubit design |
| 10:50 – 11:20 | **Coffee Break** | |
| 11:20 – 12:10 | Martin Kirk | Exchange coupled spin qubit design and photoinduced ground state electron spin polarization |
| 12:10 – 2:00 | **Lunch** | |
| 2:00 – 2:50 | Joe Zadrozny | Chemical tailoring of spins to act like other spins |
| 2:50 – 3:40 | Vivien Zapf | Routes to magnetoelectric coupling in molecular systems |
| 3:40 – 4:00 | **Coffee Break** | |
| 4:00 – 4:50 | Natia Frank (virtual) | Role of charge transfer for spin-state gating in transition metal and organic spin systems |
| 4:50 – 5:20 | Ekaterina Dolgopolova | Well-defined phthalocyanine-based molecular qubit architectures |
| 5:20 – 5:50 | Jonathan Snow | Perovskite significance in the natural world (and now for something completely different!...) |

## Tuesday June, 7th

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|---|---|---|
| 7:30- 8:30 | **Breakfast (provided by TSRC)** | |

**Chair: Vivien Zapf**

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| 9:00 – 9:50 | Steve Hill | Molecular clock qubits |
| 9:50 – 10:40 | Guillem Aromi | Spin-based multiqubit quantum gates using heterometallic lanthanide molecules |
| 10:40 – 11:10 | **Coffee Break** | |
| 11:10 – 12:00 | Leoni Barrios Moreno | Is the supramolecular modulation of spin-based qubits possible? |
| 12:00 – 2:00 | **Lunch** | |
| 2:00 – 2:50 | Obadiah G. Reid | Triplet excitons as progenitors and carriers of quantum information |
| 2:50 – 3:40 | Victor V. Albert | Molecular rotational state spaces for quantum information processing |
| 3:40 – 4:00 | **Coffee Break** | |
| 4:00 – 4:50 | Hai-Ping Cheng | First-principles modeling of qubits and magnetic molecules |

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| *4:50 – 5:20* | Manoj Vinayaka Hanabe Subramanya | Pulsed EPR capabilities of High Power quasi optical spectrometER (HiPER) |
| *6:30 – 7:30* | ***Town Talk at the Telluride Conference Center in Mountain Village*** | |

## Wednesday, June 8th

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|---|---|---|
| *7:30- 8:30* | ***Breakfast (provided by TSRC)*** | |
| *9:00* | ***Group hike (TBD)*** | |
| ***Chair: Ekaterina Dolgopolova*** | | |
| *1:00 – 1:50* | Jennifer Hollingsworth | Designing optical nanomaterials to be the ideal partners for solid-state spin qubits |
| *1:50 – 2:40* | Andrew Jones | Deterministic creation, characterization, and manipulation of nanostructure-based quantum emitters using scanning probe microscopy techniques |
| *2:40 – 3:00* | ***Coffee Break*** | |
| *3:00 – 3:50* | Andrei Piryatinski | Role of material system fluctuations and correlations in quantum photon generation |
| *3:50 – 4:40* | Eric Bittner | Probing many body dynamics with entangled photons: correlating entropy change with exciton/exciton correlation |
| *5:30 – 7:00* | ***All-TSRC Picnic*** | |

## Thursday June, 9th

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|---|---|---|
| *7:30- 8:30* | ***Breakfast (provided by TSRC)*** | |
| ***Chair: Andrew Jones*** | | |
| *9:00 – 9:50* | Ben Stein | Ultrafast studies of the excited state dynamics of f-element complexes |
| *9:50 – 10:20* | Sam Greer | Electron paramagnetic resonance studies of f-element complexes |
| *10:20 – 10:50* | ***Coffee Break*** | |
| *10:50 – 11:40* | Wolfgang Wernsdorfer (virtual) | Operation quantum states in single molecular spin qubits and qudits. |
| *11:40 – 1:30* | ***Lunch*** | |
| *1:30 – 2:20* | Nick Chilton | Spin-dynamics in magnetic molecules |
| *2:20 – 3:10* | Alessandro Lunghi | Spin-phonon relaxation in magnetic molecules: from theory to ab initio simulations |
| *3:10 – 3:40* | ***Coffee Break*** | |
| *3:40 – 4:10* | Magdalena Owczarek | Close-to-room-temperature magnetoelectric coupling via spin crossover in Fe(II) molecule-based compound |

## Friday, June 10

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|---|---|---|
| *7:30- 8:30* | ***Breakfast (provided by TSRC)*** | |

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| *Chair: Sam Greer* | | |
| *9:00 – 9:50* | Xiaoguang Zhang | Modeling spin interaction in magnetic molecules for qubit operation and decoherence |
| *9:50 – 10:40* | Nikolai Sinitsyn | Coherent reaction between molecular and atomic Bose-Einstein condensates: integrable model |
| *10:40 – 11:10* | ***Coffee Break*** | |
| *11:10 – 12:00* | Yu Zhang | First-principles modeling of Spin-Spin interactions and Spin-phonon relaxation |
| *12:00 – 2:00* | ***Lunch*** | |
| *2:00 – 5:00* | ***Informal discussions and collaboration*** | |