

## Detailed program Correlated Disorder 2024

Tuesday 27<sup>th</sup> February

9.00-9.10: <b>Welcome</b>
Structures with correlated disorder (Arkadiy Simonov)
9.10-9.55: <b>Truchet-tile architectures in materials chemistry</b> , <a href="#">Andrew Goodwin</a>
9.55-10.40: <b>Frustration and correlation in superionic conductors</b> , <a href="#">Brandon C. Wood</a>
10.40-11.10 <b>Coffee</b>
Structures with correlated disorder, continued (Brandon Wood)
11.10-11.50: <b>Modelling O/F ordering in inorganic oxyfluorides</b> , <a href="#">Monique Body</a>
11.55-12.15: <b>Disorder-induced conductivity in fully reduced solid electrolytes for batteries</b> , <a href="#">Theodosios Famprikis</a>
12.15-13.20: <b>Lunch</b>
Disorder and magnetism (Jonathan White)
13.20-14.05: <b>Tuning magnetoelectricity in a mixed-anisotropy antiferromagnet</b> , <a href="#">Ellen Fogh</a>
14.05-14.25: <b>Room temperature magnetic spirals by design</b> , <a href="#">Marisa Medarde</a>
14.25-14.45: <b>Study on the effect of Fe and Sb doping in the magnetic frustration of <math>\text{Sr}_2\text{Cu}(\text{W}_{0.5}\text{Te}_{0.5})\text{O}_6</math> perovskite</b> , <a href="#">Cynthia P. C. Medrano</a>
14.45-15.05: <b>Emergence of highly coherent two-level systems in a noisy and dense quantum network</b> , <a href="#">Markus Müller</a>
15.05-15.35 <b>Coffee</b>
Theory (Markus Müller)
15.35-16.20: <b>Fully packed loops</b> , <a href="#">Henrik Schou Roising</a>
16.20-17.05: <b>Effects of critical magnetic fluctuations on skew scattering and thermoelectric effects</b> , <a href="#">Tim Ziman</a>
Posters and dinner
17.05-18.15 <b>Posters</b>
18.15 <b>Dinner</b>

Wednesday 28<sup>th</sup> February

Pyrochlores and charge ice (Tim Ziman)
8.55-9.40: <b>Fluctuation-induced spin nematic order in magnetic charge-ice</b> , <a href="#">Peter M Derlet</a>
9.40-10.25: <b>Collective magnetic state induced by charge disorder in the non-Kramers rare-earth pyrochlore <math>Tb_2ScNbO_7</math></b> , <a href="#">Virginie Simonet</a>
10.25-10.55: <b>Coffee</b>
Pyrochlores and charge ice, continued (Gavin Macauley)
10.55-11.15: <b>From the modelling of structural disorder towards the understanding of magnetic properties in <math>Tb_2Hf_2O_7</math></b> , <a href="#">Romain Sibille</a>
11.15-11.35: <b>Enhanced quantum spin dynamics in substituted non-Kramers spin ice <math>Ho_2(Ti_{1-x}Hf_x)_2O_7</math></b> , <a href="#">Nathan Bujault</a>
11.35-11.50: <b>A symmetry sustaining quantum phase transition in kagome ice</b> , <a href="#">Peter Holdsworth</a>
11.55-12.15: <b>Algebraic loop liquid in <math>CsNiCrF_6</math></b> , <a href="#">Amirreza Hemmatzade</a>
12.15-13.20 <b>Lunch</b>
Diffuse scattering (Andrew Goodwin)
13.20-14.05: <b>Chemical and Magnetic Frustration in Quantum Magnets</b> , <a href="#">Joe Paddison</a>
14.05-14.50: <b>Interaction space modelling for the analysis of structural disorder diffuse scattering</b> , <a href="#">Ella M Schmidt</a>
14.50-15.10: <b>Origin of correlated diffuse scattering in the hexagonal manganites</b> , <a href="#">Tara N. Tošić</a>
15.10-15.40 <b>Coffee</b>
Disorder and magnetism, continued (Peter Holdsworth)
15.40-16.00: <b>From order to randomness: Onset and evolution of the random-singlet state in bond-disordered 1D systems</b> , <a href="#">Toni Shiroka</a>
16.00-16.20: <b>Phase Transitions and Magnetic Order in a Ruby Lattice Artificial Spin Ice</b> , <a href="#">Luca Berchiolla</a>
16.20-16.40: <b>Towards Dynamics of Correlated Disorder with High Brilliance X-rays</b> , <a href="#">Nelson Hua</a>