

APS WK#13: A Decade through the Looking Glass: X-ray Scattering on Quantum Materials in Pulsed and Persistent Magnetic Field

Organizers: Zahir Islam, Ulrich Welp, and Antonino Miceli

With APS-U rising on the horizon, this workshop aims to highlight a portfolio of high-field diffraction experiments on quantum materials to inform future studies and experimental needs. In a global arena with powerful techniques at other new as well as upgraded hard x-ray sources equipped with high-field magnets, it is timely to exchange ideas on how best to leverage complementary opportunities. Of particular interest is an incisive look into difficult-to-access phase space, means to leverage subtle diffraction contrasts, and concurrent multi-modal measurements. Furthermore, discussions on ways to go beyond measuring 'average' properties by imaging to obtain spatially resolved information are anticipated.