WELCOME AND INTRODUCTIONS

JOSH VURA-WEIS, Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana, IL, USA; ROBERT BAKER, Department of Chemistry and Biochemistry, The Ohio State University, Columbus, OH, USA; SCOTT G SAYRES, School of Molecular Sciences, Arizona State University, Tempe, AZ, USA.

This talk will provide an introduction to this mini-symposium, which features advances in high-harmonic generation and the spectroscopy it enables. This strong-field process is a sensitive probe of small-molecule electronic structure, as the spectrum of the extreme ultraviolet (XUV) photons produced by the ionization-recollision process measures the shape and energy of the molecular orbitals. Furthermore, the XUV pulse can be used as an element-specific probe of electron dynamics in molecules and materials at femtosecond to attosecond timescales.