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**"Ultrafast Dynamics with X-ray Eyes"**

Brief abstract: X-rays provide a unique spectroscopic view of molecules and materials, from an element-specific and orbital-selective frame of reference. Femtosecond and attosecond X-ray and extreme ultraviolet pulses (XUV) are used to probe curve crossings and conical intersections in molecules, coherent vibrational superpositions, structural rearrangements, electron and hole carriers in solids, coherent phonon motions, and core hole excitons, revealing breathtaking 'movies' of novel, ultrashort dynamical processes.

Short bio:

Stephen Leone is the John R. Thomas Endowed Chair in Physical Chemistry, Professor of Chemistry and Physics at the University of California, Berkeley, and faculty investigator, Lawrence Berkeley National Laboratory. His research interests are ultrafast and attosecond laser investigations of atomic, molecular, and solid state dynamics. His honors include the American Chemical Society Award in Pure Chemistry, the Herbert P. Broida Prize of the American Physical Society, the Bourke Medal of the Faraday Division of the Royal Society of Chemistry, the American Chemical Society Peter Debye Award, the Polanyi Medal of the Gas Kinetics Division of the Royal Society of Chemistry, the Irving Langmuir Prize in Chemical Physics of the American Physical Society, the Ahmed Zewail Award of the American Chemical Society, and an Honorary Doctorate from the University of Warwick. He is a member of National Academy of Sciences and Fellow of the American Academy of Arts and Sciences