

THEORETICAL MATERIALS DESIGN AT THE NEXUS OF INSIGHT & MODERN TOOLS

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In this talk, I will emphasize the ways that physical formulation and insight guide the discovery of new materials, enhancing data-driven approaches. Specific examples will include the advancement of bulk photovoltaics and topological semimetals. The interlocking roles of symmetry, band topology, defects, electron counting, dimensionality crossover, and nanoscale patterning will be developed, and the connection of these phenomena with data searching techniques will be explained.

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2:00 PM

CFEL
SEMINAR ROOMS I-III

