


**TIME: 12:30-2:00 PM    PLACE: SCIENCE HALL WEST 301**

A blue decorative graphic consisting of a series of overlapping, slanted rectangular shapes.

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**WHEN: THURSDAY, OCT 20<sup>TH</sup>, 2016**

**“X-ray vision into the world of Enzymes”**

Biology uses protein allostery at key junctions in metabolic pathways. Allosteric enzymes are particularly important in controlling the fluxes of metabolites, and they do so by changing their activities in response to changes in their environment. In this talk, I will discuss the use of small-angle X-ray scattering (SAXS) to computationally purify complex allosteric enzymes that exist as conformational mixtures in solution. In particular, I will discuss the use of evolving factor analysis (EFA), a powerful variant of singular value decomposition (SVD), to data obtained by chromatography-coupled SAXS.