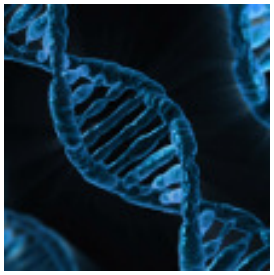

Contribution ID: **73** Type: **Oral presentation**

KEYNOTE 10 - X-ray Photon Correlation Studies of Diffusion in Concentrated Protein Suspensions

Tuesday 5 June 2018 16:10 (40 minutes)

The talk will present an introduction to x-ray photon correlation spectroscopy (XPCS) and the specific issues associated with XPCS measurements on biological macromolecules. This will include flux requirements and methods to ameliorate beam damage. XPCS measurements of the dynamics of concentrated suspension of eye-lens proteins will be presented. The measured time correlation functions from alpha crystallin suspensions will be compared with Langevin dynamics simulations. XPCS, dynamic light scattering and neutron spin echo measurements will be compiled to yield a comparison of concentrated alpha crystalline suspensions with hard sphere colloid theory over a wide range of length and time scales.

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Presenter: Prof. LURIO, Laurence (Northern Illinois University)

Session Classification: Dynamics of Proteins in Crowded and Confined Geometry

Track Classification: Dynamics of proteins in crowded and confined geometry