## MS28-01 | CHALLENGES IN MEASUREMENT AND INTERPRETATION OF SCATTERING FROM PROTEIN CRYSTALS

Meisburger, Steve (Cornell University, Ithaca, USA); Case, David (Rutgers University, Piscataway, USA); Ando, Nozomi (Cornell University, Ithaca, USA)

The collective motions of proteins are important for function, yet these motions are a challenge to observe experimentally. Intriguingly, when such motions occur in protein crystals, they leave distinctive fingerprints in the scattering between the Bragg peaks. The nascent field of "crystallography beyond Bragg" aims to extract information of biological relevance from this diffuse signal. However, both measurement and interpretation have been challenging. In this talk, I will discuss these challenges and our recent findings on the total scattering from proteins crystals.