

## The Electron Ion Collider User Group Meeting



Contribution ID: 54

Type: **not specified**

### **Bound nucleon structure studies with an EIC**

*Friday, 8 July 2016 16:55 (25 minutes)*

Results from recent experiments show that short-range interactions between nucleon in nuclei form correlated, high-momentum, neutron-proton pairs. These pairs are due to the dominance of the tensor part of the nucleon-nucleon interaction at short distances dominate the momentum distribution of nucleons above the Fermi momentum of the nucleus. Recent works have shown that the existence and nature of SRC pairs has wide ranging implications for atomic, nuclear and astro physics, including neutrino-nucleus scattering, neutrino less double beta decay, the EMC effect, the NuTeV anomaly, the nuclear symmetry energy and neutron stars structure and more. In this talk I will present the possibility of studying SRC pairs, and their partonic structure, at an EIC, using the method of spectator tagging in Quasi-elastic and Deep-Inelastic kinematics.

**Presenter:** HEN, Or

**Session Classification:** Nucleon Structure and Interactions (Theory)