Contribution ID: **4** Type: **not specified**

First Direct Observation of Migdal Effect in Neutral Projectiles

The Migdal effect, a phenomenon in which a nucleus emits an electron following a perturbation, is considered one of the most sensitive methods for detecting sub-GeV dark matter to date. However, for over 80 years, direct observational evidence has been lacking. This presentation will showcase the gas pixel detector we designed for the direct observation of the Migdal effect, along with the experiments and results obtained using neutron beams. We will report the first direct observation of the Migdal effect in neutral beam collisions, as well as the measurement of its cross-section.

Presenter: Prof. 刘, 倩 (中国科学院大学)

Session Classification: Session 1