

Recent Developments in Wavelength-Shifting Coatings for Noble Element Detectors

Tuesday, 11 December 2018 08:40 (25 minutes)

Charged particles generate copious amounts of scintillation light in the far ultraviolet when passing through the noble elements. Directly detecting these deep UV photons is challenging, and a common technique is to employ photofluorescent compounds as wavelength-shifters to convert this scintillation light into the visible. A number of challenges continue to present themselves in the ongoing efforts to optimize designs in this detector paradigm, particularly in the realm of argon-based detectors. From new measurements to creative detector designs, I will summarize a variety of recent findings and innovative approaches in this area of active research.

Primary author: Prof. WHITTINGTON, Denver (Syracuse University)

Presenter: Prof. WHITTINGTON, Denver (Syracuse University)

Session Classification: Parallel Session: Noble Element Detectors

Track Classification: Nobel Element Detectors