

New developments in VUV photo-detection

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Noble element Time Projection Chambers are cutting edge detectors in high energy physics, their use spanning across fields from neutrino to dark matter to neutrino-less double-beta decay experiments. Whereas the charge collection is a well-understood process, improving the light collection is key to enhance detection sensitivity. Noble elements (Xenon and Argon) scintillate in the deep VUV (128 and 178 nm). Improvements in the detection technologies for these challenging wavelengths are required for next generation experiments to reach their physics goals. In this talk, an overview of different approaches being studied in the University of Manchester is presented, including new semiconductor materials, metallenses and coatings.

Do you need a VISA letter for traveling to Canada ?

No

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