Room Temperature SiPM Charcterization for use in HAICU

Monday, August 19, 2024 2:25 PM (10 minutes)

SiPMs are single photon detectors that will be used to detect the fluorescence of magnetically trapped hydrogen in the HAICU experiment at TRIUMF. HAICU's goals include the development of laser cooling and atomic interferometry with the lightest atom. Room temperature characterization is useful for determining the key properties of a new SiPM device. These properties include but are not limited to: signal to noise ratio, system dead time, and dark noise rate. During the presentation I will cover the motivation for the HAICU experiment, the role of SiPMs in HAICU, and a brief overview of the room temperature SiPM characterization conducted at TRIUMF.

What area of study best describes your talk?

Physics

If you answered 'Other', please provide the study area.

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