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## **TALK: SPLENDOR: narrow-gap quantum materials for light dark matter**

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Low-mass direct detection experiments based on conventional semiconductors such as silicon and germanium are achieving impressive sensitivity for dark matter masses above 1 MeV. However, to probe dark matter-electron scattering via electronic excitations for even lighter dark matter masses, more exotic materials with sub-eV band gaps are required. I will give an overview of the SPLENDOR program, which aims to develop a prototype detector for keV-MeV dark matter based on narrow-gap quantum materials. This research program involves close interdisciplinary collaboration with condensed matter theorists and experimentalists, in all stages from detector material synthesis to determining the experimental sensitivity via the density response function.

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