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Direct Searches for Particle Dark Matter: An Overview

Tuesday, April 14, 2026 9:15 AM (45 minutes)

The existence of dark matter is well established through its gravitational effects on astrophysical and cosmological scales, yet its particle nature remains unknown. Among the most compelling candidates are weakly interacting massive particles (WIMPs) and other particle-like dark matter scenarios that can be probed through direct detection experiments. In this overview talk, I will provide a broad introduction to the theoretical and phenomenological framework underlying direct detection of particle dark matter and will highlight some of the most sensitive ongoing and upcoming experimental searches with a focus on conventional detection concepts.

Do you plan to give the talk in person?

Yes

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