

XENON1T

Friday, May 15, 2009 4:01 PM (30 minutes)

Establishing the nature of Dark Matter is one of the great challenges in science today. The XENON Dark Matter project has successfully established the dual phase liquid xenon time projection chamber as the world-leading technique in searches for Weakly Interacting Massive Particles (WIMPs). This year, we are starting the third generation of Dark Matter searches with the XENON1T experiment, where the first two generations (XENON10, XENON100) have been leaders in the field. XENON1T sets out to push current best limits by the LUX experiment by another factor of ~25 in sensitivity, opening vast discovery space. I will review recent accomplishments and current status of the XENON project.

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Session Classification: DM