Search for New Physics with Electronic-Recoil Events in XENON1T

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on behalf of the XENON collaboration

Chair: Stefano Ragazzi (LNGS Director)

Abstract: We report results from searches for new physics with low-energy electronic recoil data recorded with the XENON1T detector. With an exposure of 1042 kg x 226.9 days and an unprecedented low background rate of (76 ±2) events/(tonne x year x keV) between 1-30 keV, the data enables the most sensitive searches for new physics such as solar axions, an enhanced neutrino magnetic moment using solar neutrinos, and bosonic dark matter.

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Zoom meeting info: xe-pr@lngs.infn.it

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