

Abstract Submitted
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Prospects for EUSO-SPB2 detection of transient astrophysical sources of neutrinos¹ MARY HALL RENO, Univ of Iowa, TONIA M. VENTERS, NASA/Goddard Space Flight Center, JOHN F. KRIZMANIC, NASA/Goddard Space Flight Center and University of Maryland, Baltimore County, EUSO-SPB2 COLLABORATION — The second flight of the Extreme Universe Space Observatory on a Super-Pressure Balloon (EUSO-SPB2) will include a telescope that points near the Earth's limb to measure the Cherenkov light emitted by high energy extensive air showers (EAS). Tau-leptons from Earth-skimming tau neutrinos may decay in the atmosphere and produce upward-going EAS. Several classes of multi-wavelength astrophysical transient sources produce high energy neutrinos as well as electromagnetic signals. We report on EUSO-SPB2s sensitivity to a variety of long- and short-duration astrophysical transients that produce neutrinos, and we describe prospects for their detection via tau neutrino-induced upward-going EAS.

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Mary Hall Reno
Univ of Iowa

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