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A Joint Analysis of the PROSPECT and STEREO ²³⁵U Antineutrino Spectra BENJAMIN FOUST, Yale University, PROSPECT COLLABORATION — The PROSPECT and STEREO experiments recently reported modern measurements of the ²³⁵U antineutrino energy spectra from highly-enriched uranium (HEU) research reactors using liquid scintillator based detectors. At HEU reactors, 99% of the antineutrino flux comes from ²³⁵U, providing a direct measure of the energy spectrum and antineutrino flux from a single isotope. STEREO and PROSPECT have provided independent measurements with different systematics from measurements at ILL (France) and HFIR (US). This analysis compares and combines both measurements to test their consistency and provide the best combined measurement of the 235U antineutrino spectrum. In this talk, I will present the current status of this joint spectral analysis.

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