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N-16 Capture to Differentiate Between Neutrinos and Antineutrinos in SK ASHLEY JONES, Duke University, SUPER KAMIOKANDE COL-LABORATION — Super-Kamiokande is a large water Cherenkov neutrino detector in Japan. Without a magnetic field, the difference between neutrinos and antineutrinos is not apparent. But when negative muons capture on oxygen nuclei, oxygen-16 becomes nitrogen-16, which beta decays. Looking for this beta decay after low energy events within detector samples can signify neutrino events.

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