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## Reactor Neutrinos in Super-Kamiokande

Electron anti-neutrinos from the beta decay of nuclear fission fragments in reactor cores are the only product from nuclear reactors which cannot be shielded. This makes them of interest in nuclear non-proliferation, as well as in oscillation experiments. Reactor neutrinos typically have an energy of a few MeV, making detection difficult in water Cherenkov detectors like Super-Kamiokande. Super-K is currently in a unique position, however, as Japan's reactors have begun to restart following total shutdown due to the 2011 tsunami. Super-K's low energy triggering system, WIT, allows for investigation into these reactor on/off periods. WIT is ~17% efficient at detecting the 2.2 MeV gamma produced when a neutron captures on hydrogen which can be used to tag inverse beta decay events. The current status of the reactor neutrino search in Super-K using neutron tagging on hydrogen will be presented.

### Mini-abstract

The status of the reactor neutrino search in Super-Kamiokande using neutron tagging on hydrogen.

### Experiment/Collaboration

Super-Kamiokande

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