

Title: Super-Kamiokande: Current Status and the SK-Gd Project

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Super-Kamiokande is a 50 kiloton water Cherenkov detector located in Kamioka, Japan. It began in 1996 and was originally designed to search for nucleon decay and study neutrino oscillations. For the last 20 years it has produced many extremely important results for atmospheric and solar neutrinos, nucleon lifetime limits, search for dark matter and astrophysical sources of neutrinos. Most notably, SK showed for the first time conclusive evidence that neutrinos have mass and undergo flavour oscillations. SK is now moving to a new phase where its ultra-pure water tank will be doped with Gadolinium, the so called SK-Gd project.

In this talk I will present recent results of the Super Kamiokande experiment with emphasis on the nucleon decay searches and the atmospheric and solar neutrino results. I will also show how the addition of Gd will help SK in the era of neutrino precision measurements.