Contribution ID: **1163** Type: **Talk**

SK-Gd looks forward

Tuesday 20 July 2021 13:12 (12 minutes)

From new electronics to changes in the PMT configuration, Super-Kamiokande (SK) has undergone several major phases along its history. The latest one, SK-VI, has been the dissolution of 13 tons of gadolinium sulfate octa-hydrate in the hitherto ultra-pure water. The goal of this new phase is to achieve a high neutron efficiency detection. This new capability allows to distinguish different neutrino reactions, enhance signals and remove backgrounds more efficiently. In fact, it has the potential to improve all analyses at SK. This new phase was preceded by the refurbishment of the detector in summer 2018 and then, the dissolution of gadolinium sulfate in summer 2020.

Keywords

neutrino, detector, gadolinium, neutron capture

Collaboration

other (fill field below)

other Collaboration

Super-Kamiokande

Subcategory

Experimental Methods & Instrumentation

Primary author: Dr MARTI MAGRO, Lluis (Universidad Autonoma de Madrid)

Presenter: Dr MARTI MAGRO, Lluis (Universidad Autonoma de Madrid)

Session Classification: Discussion

Track Classification: Scientific Field: NU | Neutrinos & Muons