

Space Science Seminar
Tuesday, 2017 October 3
11:00 a.m.
NSSTC/2096

**Technical Study of a Solar Neutrino Spacecraft
Close to the Sun**

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Host: Dr. Michelle Hui

A detailed study of neutrino signal events and backgrounds were made of the neutrino Solar Orbiting Lab preliminary design using the Geant-4 Monte-Carlo package. Ideas behind the detector system construction and neutrino detection methods were further applied and combined with shielding studies of the detector array from solar EM radiation. In addition to this the electronic trigger was further developed and its function applied to these detector and background rates, leading us to believe that the final detector idea is feasible, all-be-it technically challenging. All of this will be summarized and presented about the impact on the spacecraft design study.

<https://solarscience.msfc.nasa.gov/colloquia/>