

College of Natural Science  
**DEPARTMENT OF PHYSICS & ASTRONOMY**  
**PHYSICS AND SOCIETY ENDOWED LECTURESHIP**



A public lecture by  
**Prof. Takaaki Kajita**

Nobel Laureate and Director of the Institute for Cosmic Ray Research

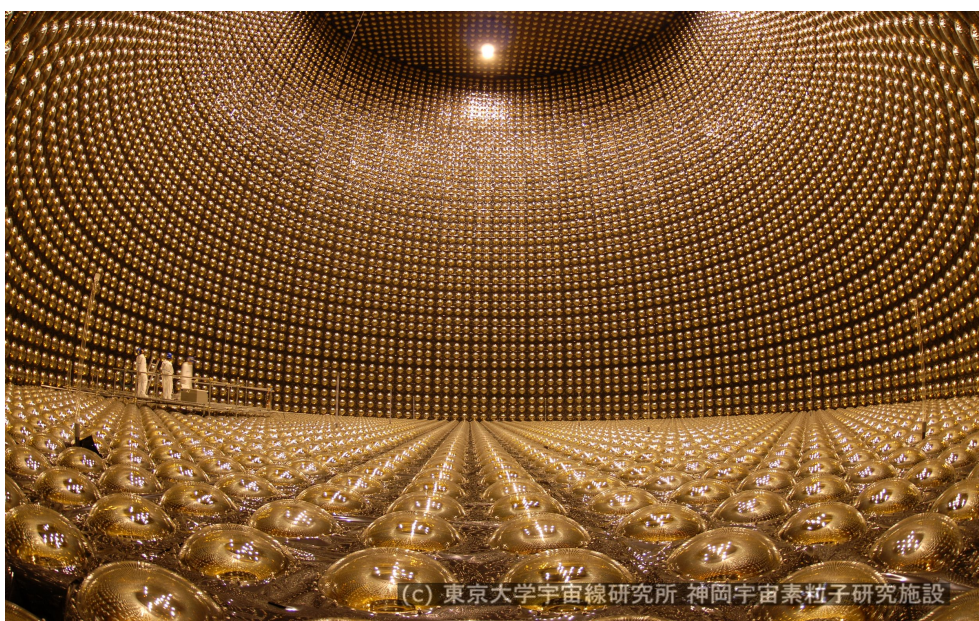
# The Secret of Neutrinos

Date: Feb 28th, 2019

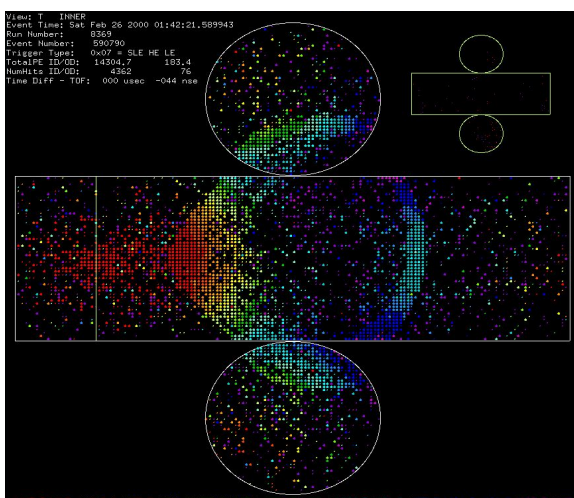
Time: 8pm

Where: MSU Biomedical and Physical Sciences Building,  
567 Wilson Rd., Room 1410

*Refreshments will be served in the BPS atrium at 7:30 pm, Free parking is available in the Abrams Planetarium parking lot (corner of Farm Lane and Shaw).*



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**N**eutrinos are sub-atomic particles which are very difficult to observe. They have been assumed to have no mass. It was predicted that, if they have masses, they could change their type while they fly.

This phenomena is called neutrino oscillations. Neutrino oscillations was discovered by deep underground neutrino experiments. I will discuss the discovery of neutrino oscillations. The implications of the discovery of the neutrino oscillations and the small neutrino masses will also be discussed.

Sponsored by the MSU Department of Physics and Astronomy  
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