

Lecture Title: Neutrino Physics: History, Status and Future

The neutrino physics is one of the most important pillars which support the realm of the elementary particle physics. Several Nobel prizes have been awarded to neutrino-related studies in 2015, 2002, 1995 and 1988. The neutrinos have unique properties such as extremely small masses and oscillations which can not be accounted for in the standard model of elementary particles. There have been a number of anomalies in neutrino experiments, some of which led to important discoveries and others may lead to breakthrough of our understanding of the elementary particle physics in the future. In these lectures, such the physics of neutrinos will be comprehensively described, mentioning to the following topics.

- * General neutrino physics and its history
- * Neutrino mass and oscillation
- * CP violation
- * Majorana neutrinos, sterile neutrinos