

Outline

Lecture 1: Introduction to neutrinos

1. Neutrino preliminaries
2. Discoveries of neutrino flavours (detectors)
3. Mass, helicity and interactions (measurements)
4. Solar and atmospheric neutrino problems (data)

Lecture 2: Neutrino flavour conversions

1. Solution of the atmospheric neutrino problem (complete)
2. Solution of the solar neutrino problem (indicative)
3. Three-neutrino mixing picture
4. Neutrino mass generation

Lecture 3: Current and future experiments

1. Long baseline experiments
2. Detectors to probe neutrino properties
3. Detectors for astrophysical neutrinos
4. Unresolved issues in neutrino physics