2025 CAP Congress / Congrès de l'ACP 2025



Contribution ID: 378

Type: Invited Speaker / Conférencier(ère) invité(e)

The Flavour of High-Energy Neutrinos

Wednesday 11 June 2025 16:45 (30 minutes)

We now have over a decade of high energy neutrino data from the IceCube telescope at the South Pole. These neutrinos convey information about their sources, propagation, and interaction via directional, energy, and flavour. I will discuss what we can learn about the flavour composition of these events with current and future telescopes, and what flavour can tell us about neutrino sources and potential new physics in the neutrino sector. I will end with a closer look at the neutrino/antineutrino ratio, accessible via the Glashow resonance, which can break important degeneracies in flavour space and provide a potentially unique probe of new physics.

Keyword-1

neutrinos

Keyword-2

flavour

Keyword-3

Author: VINCENT, Aaron (Queen's University)

Presenter: VINCENT, Aaron (Queen's University)

Session Classification: (PPD) W3-4 Flavour Physics & Beyond | La physique des saveurs et au-delà

(PPD)

Track Classification: Symposia Day (Wed June 11) / Journée de symposiums (Mercredi 11 juin): Symposia Day (PPD - PPD) - Flavour Physics & Beyond / La physique des saveurs et au-delà