

Lectures on Neutrino Physics

Rapport sur les contributions

ID de Contribution: 1

Type: **Non spécifié**

Lecture II

mardi 31 mars 2026 10:30 (1h 30m)

Orateur: Prof. ZUKANOVICH FUNCHAL, Renata (University of Sao Paulo)

ID de Contribution: 2

Type: **Non spécifié**

Lecture III

mercredi 1 avril 2026 10:30 (1h 30m)

Orateur: Prof. ZUKANOVICH FUNCHAL, Renata (University of Sao Paulo)

ID de Contribution: 3

Type: Non spécifié

Topical seminar: "Lessons from first JUNO results"

jeudi 2 avril 2026 11:00 (1 heure)

First results from the JUNO reactor neutrino experiment already determine with world-leading precision to the solar mixing parameters. This presentation will perform an exploratory study explaining why JUNO is able to determine with precision the solar mixing parameters and beyond these, taking advantage of the first JUNO data release to discuss its sensitivity to the large squared-mass splitting, the atmospheric mass-splitting.

This presentation will discuss why JUNO in the future will be able to determine the neutrino mass ordering. On the other side, the actual data, when combined with constraints from global oscillation data, may already contain some information on the neutrino mass ordering. Indeed, we find that the combination of the complementary solar and atmospheric mass splitting determinations gives a slight preference for Normal Ordering, with a p-value for Inverted Ordering of 2%–2.6% (2.2σ – 2.3σ). We study the robustness of this result with respect to potential systematic uncertainties and statistical fluctuations. Taken at face value, a full global analysis of oscillation data including the publicly available JUNO information and data leads to a preference for Normal Ordering with $\Delta\chi^2 = 4.6$ and 9.4 without and with Super-K and IceCube-24 atmospheric neutrino data, respectively.

Orateur: Dr PINHEIRO, João (Tsung-Dao Lee Inst.)

ID de Contribution: 4

Type: **Non spécifié**

Lecture IV

vendredi 3 avril 2026 09:30 (1h 30m)

Orateur: Prof. ZUKANOVICH FUNCHAL, Renata (University of Sao Paulo)

ID de Contribution: 5

Type: **Non spécifié**

Tutorials

mercredi 1 avril 2026 14:00 (1h 30m)

Orateurs: LEAL, Luighi; Dr URREA, Salvador

ID de Contribution: 7

Type: **Non spécifié**

Lecture I

lundi 30 mars 2026 10:30 (1h 30m)

Orateur: Prof. ZUKANOVICH FUNCHAL, Renata (University of Sao Paulo)