

Seminarium Szkoły Doktorskiej NCBJ

**Thursday, 21 December, 9:15
room 207, Pasteura 7**

<https://www.gotomeet.me/NCBJmeetings/phd-seminar>
<https://events.ncbj.gov.pl/event/300/>

Speaker:

Yashwanth Prabhu (Szkoła Doktorska NCBJ)

Title:

**Latest neutrino oscillation results from T2K and upcoming analysis updates
for 2024**

Abstract:

In this talk, I will discuss T2K's neutrino oscillation results from its 2022 analysis, mostly based on my talk at the EPS-HEP conference in Hamburg, in August 2023. I will briefly cover neutrino oscillation and its current unknowns, then talk in detail about T2K's experimental setup and how it obtains oscillation parameters. T2K performs independent oscillation analyses with two fitters that are based on different statistical approaches, although both of them produce results that are consistent with each other, as will be shown. I will then talk about upcoming updates and upgrades to T2K, along with my PhD analysis and how it will be included in T2K's 2024 oscillation analysis.