



**Here,
There &
Everywhere**

PhD Summer School on Neutrinos

July 17-21, 2023

Niels Bohr Institute, Copenhagen

Contribution ID: 105

Type: Oral

Neutrino Decay scenarios on the Cosmic Neutrino Background

Monday, 17 July 2023 14:45 (15 minutes)

In this work, we explore the consequences of neutrino decay facilitated by a neutral scalar on possible cosmic neutrino background (CvB) detection in the future, especially in the PTOLEMY experiment. We analyze the distortion of the expected event spectrum as a function of the singlet mass and Yukawa couplings, and we consider both a three-neutrino scenario and a scenario with an extra sterile neutrino.

Primary authors: KOPP, Joachim (CERN and JGU Mainz); FERREIRA LEITE, Leonardo (State University of Campinas (Unicamp) / CERN)

Presenter: FERREIRA LEITE, Leonardo (State University of Campinas (Unicamp) / CERN)

Session Classification: Student Talks