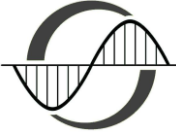




UNIVERSITÀ  
degli STUDI  
di CATANIA



DIPARTIMENTO DI FISICA E ASTRONOMIA  
“ETTORE MAJORANA”

DOTTORATO DI RICERCA IN FISICA  
CICLO XXXIX A.A. 2023/2024

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## TITLE

# Neutrino Physics

CFU 3

### Teaching staff

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**Reception hours:** Tuesday 17:00

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### Program of the course:

Introduction

Fermi theory of beta decay

Neutrino experimental evidences

Solar Neutrinos

Neutrino oscillations and neutrino properties

Neutrino Mass Ordering

CP violation in Leptonic Sector

Sterile Neutrinos

Neutrino Mass

Double beta decay

Atmospheric Neutrinos

Cosmic neutrinos

Neutrinos in Multimessenger Astronomy

## **Bibliography:**

Scientific paper and slides provided by the teacher