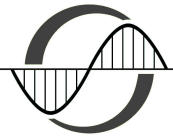




UNIVERSITÀ
degli STUDI
di CATANIA



DIPARTIMENTO DI FISICA E ASTRONOMIA
“ETTORE MAJORANA”

DOTTORATO DI RICERCA IN FISICA
ANNO ACCADEMICO 2020/2021 CICLO XXXVI

TITLE

Advanced topics in nuclear astrophysics

2 CFU

Teaching staff

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Reception hours: upon student request

Program of the course:

1. The R-matrix method in nuclear astrophysics
 - a. Basic theory
 - b. Applications to nuclear astrophysics
 - c. Hands-on session
2. Fusion reactions in plasmas produced by laser interaction with matter
3. Photodissociation reactions in nuclear astrophysics

Bibliography:

Iliadis C., Nuclear Physics of Stars, Wiley (2015)