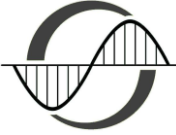




UNIVERSITÀ
degli STUDI
di CATANIA



DIPARTIMENTO DI FISICA E ASTRONOMIA
“ETTORE MAJORANA”

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

Optical design with Raytracing

2 CFU

Teaching staff

Name Surname: Matteo Munari

Email: matteo.munari@inaf.it

Office: OACT

Reception hours: Mon 11-13

Program of the course:

The course is an introduction to the design of optical systems with the use of raytracing codes

- Review of first- and third-order optics
- Optimization
- Tolerancing
- Multiconfiguration
- Macros & API
- Non-sequential systems / Straylight

Bibliography:

- Kingslake - Lens design fundamentals, SPIE Press, 2010
- Fischer / Tadic-Galeb - Optical System Design, McGraw Hill, 2000
- Geary - Lens Design with practical Examples, Willmann-Bell, 2002
- Fest - Stray Light Analysis and Control, SPIE Press, 2013