

PhD Course - anno accademico 2024/25

Semestre: I

October – December 2024

TITOLO CORSO: History of 20th Century Physics

DOCENTE: Matteo Tuveri

Corso seminariale per la laurea: PhD (Dottorato di ricerca)

Duration: 8 hours, 4 lectures of two hours each

Language: English

Program:

1) *First lecture – The route to contemporary Physics*

2) *Second lecture - Relativity*

The birth of Relativity; Space and time: General Relativity.

3) *Third lecture - Quantum Mechanics*

Atoms; Quantum Mechanics; Particles and Colliders

3) *Fourth Lecture - Technology, Astrophysics, cosmology and contemporary challenges*

Condensed matter; Cosmology; The future of physics

Modalità svolgimento corso:

Lectures will be frontal.

Active learning strategies will be used in both synchronous and asynchronous contexts.

Eventuali testi di riferimento:

Papers given as materials during the course

Modalità di svolgimento dell'esame:

Oral presentation (max 10 minutes, slides allowed) about topics to choose from the following:

- History of one contemporary physicists (from the end of 19th century until now)
- historic overview of facts that happens in contemporary physics (from the end of 19th century until now)

Calendario attività (proposta)

25/11 (9-11)

27/11 (9-11)

4/12 (9-11)

9/12 (9-11)