

# Dottorato in Fisica degli acceleratori

*GC, D.del Re- Sapienza Univ Roma and INFN Roma  
Incontro studenti primo anno  
20 nov 2023*

# Introduction

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- ▶ PhD programme **dedicated** to the Physics of **Accelerators** both theoretical and experimental
    - ▶ **Unique** in Italy
    - ▶ Based in Sapienza but **national**
    - ▶ **Grants (39<sup>th</sup>)**: 6 INFN + 1 Sapienza + 7 other (PNRR,...)
    - ▶ **Courses** teach principles of accelerator theory and its applications in different domains
      - ▶ Students **required** to **attend** both theoretical and hands-on courses at INFN labs
      - ▶ **Classes** can be attended **remotely**
      - ▶ **Research** activity can be done at **home lab**
      - ▶ **Web site**: [https://phd.uniroma1.it/web/FISICA-DEGLI-ACCELERATORI\\_nD3504\\_IT.aspx](https://phd.uniroma1.it/web/FISICA-DEGLI-ACCELERATORI_nD3504_IT.aspx)
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# Timeline for your PhD

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- ▶ **First year (start on Nov 1st)**

- ▶ Attend **classes**: 144 hours (18 ECTS)
- ▶ Attend **seminars** (mandatory!)
- ▶ Submit by end of Dec a **study plan** to be approved by the Scientific Board.

- ▶ **Second year**

- ▶ (Beginning) Prepare a **thesis project**
- ▶ (End) give a **seminar** on the status of the project
  - ▶ Admission to 3rd year by the Board
- ▶ **Hands-on** training (LNF)

- ▶ **Third year**

- ▶ **Work** on the PhD thesis project
- ▶ Thesis **writing** and interaction with referee
- ▶ Final seminar (three months before the **defence**)
  - ▶ Currently organising three slots for the defence : Jan - May and Sep.

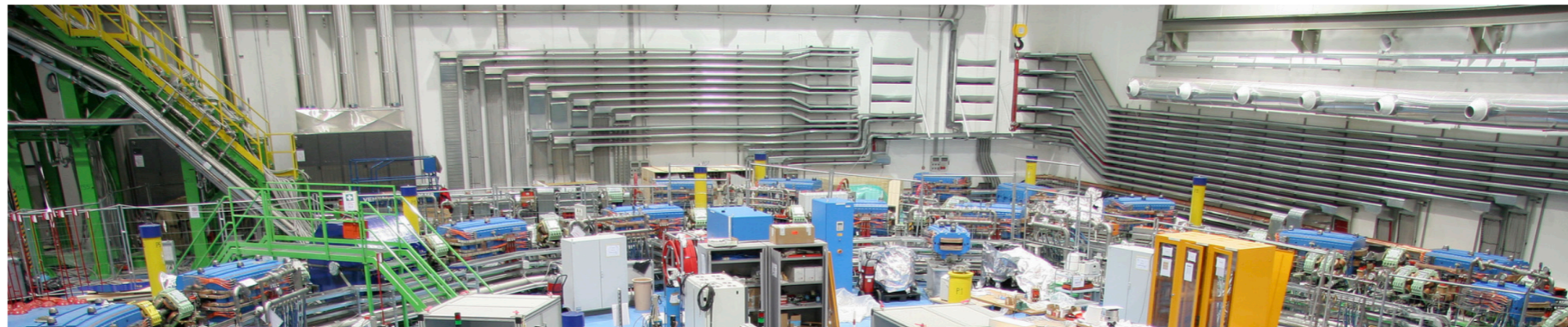
# Course and seminars

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- **1<sup>st</sup> semester:**
    - **JUAS** (I and II courses) Jan-Feb. **Please register!**
  - 2<sup>nd</sup> semester (# ECTS)
    - **Alesini:** “Physics, Technology and Applications of Linear Accelerators” (3), Mar-May
    - **Ferrario:** “Physics of High Brightness Accelerators” (6), end Mar-Jun
    - **Migliorati, Metral, Mostacci:** “Collective effects in circular accelerators” (3) late spring
    - **Pietropaolo - ENEA :** “Neutron production mechanisms, sources and applications” (3)
    - **Sarti - Patera:** “Radiation-Matter interaction for medical physics”, Mar-Jun (3)
    - **Seminars**
  - **3<sup>rd</sup>, 4<sup>th</sup> semester:**
    - **Seminars. Hands-on**
  - **5<sup>th</sup>, 6<sup>th</sup> semester:**
    - **Seminars**
  - **Detailed program of each course (last year):**
  - In principle **courses from PhD and Master in Physics can be added** (need to be approved by the PhD board)
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# Research topics

- ▶ Today's meeting is informative
- ▶ You might find a thesis project
- ▶ Also keep on eye on <https://acceleratori.infn.it/index.php/it/>



Istituto Nazionale di Fisica Nucleare | INFN  
Acceleratori - Accelerators

HOME COMITATO ▣ STRUTTURE ▣ RETI ▣ ATTIVITÀ E RICERCA ▣ SEMINARS & WORKSHOPS ▣

Benvenuto nel sito del gruppo di lavoro INFN Acceleratori

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Fondi Esterni  
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