**Objective**

The document provides information about the Dottorato di Ricerca in Fisica (PhD program in Physics) at the University of Bologna. It includes details about the coordinator, website, duration, academic year, program start date, main department, partner institutions, research topics, requirements, admissions procedures, mandatory documents, and agenda.

**Coordinator and Website**

- **Coordinator**: Professor Fabio Ortolani – Department of Physics and Astronomy - Viale Berti Pichat, 6/2 - Bologna - fabio.ortolani@unibo.it

**Duration and Academic Year**

- **Duration**: 3 years
- **Academic Year**: 2013/2014
- **Programme Start Date**: 01/01/2014
- **Programme Held In**: Italian - English

**Main Department**

- Department of Physics and Astronomy

**Partner Institutions**

- Universita` di Toulon et du Var - Francia
- Freie Universitaet Berlin - Germany
- Universita` di Lione – Francia
- California Institute of Technology - USA
- Universita` di Paris VII - Francia
- Goteborgs University - Svezia
- Comsats Institute of Information Technology - Islamabad - Pakistan
- University of California at Riverside - USA
- Brown University Rhode Island Hall Providence - USA
- Universita` di Bucarest - Romania
- Universite´ de Caen Basse-Normandie France
- Universita` di Castilla - La Mancia - Spagna
- Istituto Nazionale di Fisica Nucleare
- Imperial College di Londra - UK

**Research Topics**

- Theoretical Physics and Foundations of Physics
- Solid State Physics
- Nuclear and Subnuclear Physics
- Applied Physics

**Requirements and Admission Procedures**

- An Italian university degree (laurea specialistica/ magistrale - 3+2 years) or pre-reform degree (vecchio ordinamento - 4 years) or an equivalent degree obtained abroad. Also applicants whose degree will be awarded no later than December 31, 2013 can participate to the selection procedures.

**Mandatory Documents**

1. CV
2. Copy of Bachelor’s and Master’s degree, list of exams taken with grades and final mark (in Italian or English)
3. Only for those who do not hold a Master’s degree when submitting the application: copy of the exams taken with grades obtained abroad. Also applicants whose degree will be awarded no later than December 31, 2013 can participate to the selection procedures.

4. Reference letters from university’s or research institution’s lecturers or researchers (to be sent through the procedure available at this URL [http://studenti.unibo.it](http://studenti.unibo.it))

**Other Documents**

- Publications
- Additional relevant documents

**Agenda**

<table>
<thead>
<tr>
<th>Description</th>
<th>When</th>
<th>Where</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written examination</td>
<td>25/10/2013</td>
<td>Department of Physics and Astronomy - Aula Magna - Via Irnerio 46 - Bologna</td>
<td>2 p.m.</td>
</tr>
<tr>
<td>Oral examination</td>
<td>04/11/2013</td>
<td>Department of Physics and Astronomy - Via Irnerio 46 - Bologna</td>
<td>9 a.m.</td>
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</tbody>
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Assessment criteria

Total score: 100/100

1. Written examination
   - minimum score required for the admission to the assessment of qualifications and to the oral examination: 30
   - maximum score: 50
   The aim of written examination is to test the applicant’s basic and technical knowledge about physics.

2. Assessment of qualifications
   - maximum score: 20
   Score is assigned as follows:
   - evaluation of the degree mark (for applicants who have an university degree at the time of submission of the application) or evaluation of the university exams taken with grades (for applicants who still not have an university degree at the time of submission of the application): max 10 points
   - publications: max 5 points
   - other qualifications: max 5 points
   The assessment of qualifications will be carried out only for those who have obtained the minimum score in the written examination.

3. Oral examination
   - maximum score: 30
   The oral examination will assess the candidate’s aptitude for scientific research, as well as his/her knowledge about general topics related to physics.

Only those obtaining a total mark (written examination + assessment of qualifications + oral examination) equal to or higher than 60/100 will be listed in the final ranking.

The results of the admission procedures will be posted at the Department of Physics and Astronomy and will be published on the website http://studenti.unibo.it, accessible through username and password of the University of Bologna provided at first registration (by selecting: sintesi delle richieste in corso → vedi dettaglio → risultati prova).

Applicants will not be informed about the outcome of the selection procedures.

The final ranking will be published on the website http://studenti.unibo.it. Information regarding the publication of the final ranking will be available on www.unibo.it/Dottorati/Bandi29.

Language requirements

During the oral examination will be assessed the knowledge of the following foreign language: English.

The admission procedures can be carried out in Italian or English, depending on the applicant’s choice.

For foreign applicants the knowledge of Italian is not required.

Positions and scholarships

Total number of positions: 16, of which:
- 6 positions with scholarship granted by University of Bologna (one scholarship is made available with funds provided in part by the Department of Physics and Astronomy)
- 2 positions with scholarship granted by public research institutions: Istituto Nazionale di Fisica Nucleare – INFN, devoted to conducting experimental or theoretical research activities in the field of Nuclear, Subnuclear and Astroparticle Physics
- 8 positions without scholarship

Extra-quota positions: 2