

# INTERNAL REGULATIONS OF THE DOCTORAL SCHOOL IN PHYSICS AND ASTRONOMY

UNIVERSITY OF FLORENCE

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## *Introduction*

1) The PhD School of Physics and Astronomy offers *two different curricula*: astronomy and physics. The first one is only oriented to astronomy and astrophysics, while, within the curriculum of physics, we address the following topics: theoretical physics, nuclear physics, subnuclear physics, material physics and applied physics. The two curricula belong to *four main areas*: theoretical physics, nuclear and subnuclear physics, condensed matter physics and astrophysics. Different thesis themes for each area are available for PhD theses. After agreements with the novel PhD students, the School Board will assign them the thesis topics and the name of scientific Supervisors. The thesis should address research topics of interest to the Department and the PhD distribution within different research groups must correspond to a balance between the different areas of research in the Department itself. Under motivated request, the PhD School Board will consider the change of the thesis title and/or of the Supervisor.

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## *Supervision arrangements*

2) Supervisors must address and follow the PhD students assigned to them in the development of the planned research to achieve the scientific objectives. Supervisors have the following responsibilities: promote the participation of PhD students at conferences and national and international schools, as well as seminars and regional colloquia; promote the publication of research carried out by the PhD students in scientific journals, with their direct involvement; promptly inform the School Board in the case any difficulty may block the achievement of the planned scientific objectives.

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## *Student tasks and Progress review*

3) PhD students must attend the training courses and seminars, colloquia and scientific meetings organized by the Department or by other Institutions contributing to the organization of the Doctorate. A detailed plan of possible teaching courses for the PhD students is defined every year and it is advertised on the web page. The teaching duties correspond to 42 credits, including 36 credits in the first year and 6 credits in the second year. The 36 credits of the first year split into 30 credits of research training courses (at least one third has to be on different subject areas from the one related to the thesis) and 6 credits of seminars and colloquia. We assume that two seminars/colloquia correspond to 1 credit. In the second year, the 6 credits are due to attending seminars and colloquia.

Under request of the PhD student, the PhD Board can assign credits for participations in national and international schools. Within two months from admission to the school, the PhD students must submit a detailed plan of the courses they intend to attend, up to the amount of the expected 30 credits; courses may be chosen among those activated under other Doctorates, or Master's degrees in related scientific disciplines. Obviously, the PhD students cannot propose courses they have already attended in the Master.

4) At the end of each year, PhD students must submit (filling a dedicated form available on the web page) the summary of their training activity during the year (training courses, seminars, colloquia and participation in national/international schools).

5) For the admission to the second year, PhD students have also to present a short *written report* (about 4 pages) of their scientific activity. There is also an *oral exam* where each student is requested to give two seminars lasting about 20 minutes each plus 10 minutes for discussion. The seminars refer to topics of the attended courses; the seminars have not to refer to arguments related to the student scientific activity. At least one seminar must be on a different scientific area with respect to the thesis.

6) For the admission to the third year, PhD students must present a *written report* (about 15 - 20 pages) with details on the progress of their research activities. They also have to give a one-hour *seminar* (45 minutes plus 15 minutes for discussion). All PhD students are requested to attend the seminars, and therefore the talk has to include an introduction for non-specialists. Supervisors will be part of the evaluation commission of the seminar of PhD students assigned to them. In addition, for the admission to the third year the PhD Board *recommends* at least one publication in journals with ISSN or participation in a conference or international school (with oral or poster presentation).

7) The PhD title is obtained according to the University rules. One publication in journals with ISSN and two other scientific contributions between publications or participation in international conferences and schools (with seminars or poster presentation) are *requested*. Motivated exceptions to this rule have to be discussed and approved by the PhD School Board.

8) After agreement by the PhD School Board, the PhD student can carry out *supplementary teaching activities* for no more than 20 hours during the first year and no more than 40 hours for each of the following years, and only in the context of teaching within the Department of Physics and Astronomy of the University of Florence. The PhD student can carry out *tutoring activities* up to a maximum of 200 hours per year. Exceptions to these rules have to be discussed and approved by the PhD School Board.

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## *Organisation of the School Board*

- 9)** The convocation of PhD School Board meeting are sent by e-mail, at least 7 days prior to the meeting date with a detailed description of the arguments listed in the agenda attached to the e-mail. The School Board can also organize telematics meetings.
- 10)** At the renewal of the Coordinator of the PhD School Board, the proposed candidate should primarily be a member of the outgoing Board. Any nomination needs to be submitted at least one month in advance of the date of appointment.
- 11)** The Vice-Coordinator of the PhD School Board is suggested by the Coordinator. If the proposed nominee does not reach the majority of the votes, the Coordinator has to submit a different nominee.

Firenze, October 2016