

SCIENTIFIC COMMITTEE EVALUATION TABLE

Evaluation of the three year period (2008/2010): for each row please specify a score from 1 to 5 (1= unsatisfactory, 2 =Satisfactory, 3=Good, 4=Very Good, 5=Excellent)

Follow-up of the previous evaluation of the Scientific Committee: for each row specify a score from 1 to 3 (1=suggestions have not been implemented; 2=suggestions have partly been implemented, 3= suggestions have completely been implemented)

	<i>Evaluation of the three year period (2008/2010)</i>	<i>Follow-up of the previous evaluation*</i>	<i>Comments</i>
	<i>score 1 -5 (min 1 – max 5)</i>	<i>score 1-3 (min 1 – max 3)</i>	
Quality of the training aims	5	3	The aims and aspirations of the Ph D School for its students are rightly focused on cutting-edge research and on instruction (advanced courses and seminar cycles). Ph.D students are associated with the Department for a relatively brief training period of three years and they are attached to research groups very early in this time span.
National and international collaborations with Academic partners	5	3	<p>The students work in EC-funded international consortia – ITN network in HE Physics: UNI-LHC; RTN – HEPTOOLS; RTN: UNIVERS-net. They also take part in various ERC advanced consortia grants.</p> <p>The idea of joint courses with regional Universities is excellent and should be pursued and encouraged. A very large number of research papers is done in the framework of international collaborations.</p> <p>The standard application procedure makes it very difficult for foreign students to apply, take the exam in Padova and wait for the decision on admission. One avenue to circumvent this difficulty is via the CARIPARO fellowships, for which candidates do not pass the standard application procedures. At the moment all admissions are completely centralized and handled by the central University administration, and it would help if once the general University-wide decisions on candidates have been taken, further contact with the successful applicants would be handled by the School.</p>

National and international collaborations with non Academic partners	5	3	Students work in top international collaborations and labs (including Legnaro LNL), including several of the leading European labs.
Research funds of the teaching staff	5	N/A	Members of the Faculty of Physics are adequately funded by competitive grants from various sources. These funds cover the research activity of Members of the Collegio, of which the thesis research of the PhD students is an integral part.
School funds availability	5	3	From our meeting with Ph D students we got the impression that they do go to schools and conferences in Italy and abroad, they are encouraged by the faculty to do this and did not feel that lack of funds had a restrictive effect. In the past the director of the school requested participation of research groups in travel expenses of students. This policy allowed substantial savings and gave the school some margin of funding that can be used for supporting other activities (such as inviting external lecturers) and to provide a measure of stability in the form of a buffer against budget cuts.
Spaces and instruments of the School	3	2	While experimental groups provide office space for their own students, theory students' space is allocated by the School (on the basis of space allocated to it by the Department). There are two rooms for theory students, with 5-6 people in one room. The student expressed preference to stay in the building where they are now, near their groups, and not move to the new building where there is more space. We feel that the Department should reorganize allocation of space and provide one more room for theory students.
Relevance of the research areas	4	2	The research areas in which the students are involved reflect the composition of the Department. There is considerable weight in traditional directions such as experimental HE Physics and Nuclear Physics as well as Astrophysics/cosmology. . In the areas covered the research is of highest

			quality and the fields are of top relevance. We trust that the department makes adjustments in a timely way to meet the requirements of upcoming areas like, for instance, experimental biological physics.
Teaching staff publications	5	3	Members of the teaching staff publish extensively and in top journals. A large fraction of the publications involve international collaborations.
PhD students publications	5	3	The same comment applies as for the Teaching Staff publications. It should be noted that a sizeable fraction of the papers are from experimental High Energy groups, with 50 papers per student, and several hundred co-authors on each paper.
Quality of the courses/seminars of the School	4	3	<p>The PhD students we met felt that they get the courses they need, at a high level, covering topics that are relevant to their research. To overcome the fact that in certain areas the number of students is sub-critical, that School has initiated joint courses with the Universities of Bologna and Ferrara, and the students were happy with this solution and even saw an advantage in travelling to a nearby University for a course. Joint courses with the University of Milano will start this year.</p> <p>The seminars in the Department cover a wide range of timely topics and are at a high level.</p> <p>One suggestion which is easy to implement is initiating a student seminar, obligatory for all Ph D students. It should consist of seminars given by the students themselves under supervision of a Faculty member, and used as a course of presentation, with credit given for participation.</p> <p>About 70-80% of the teaching is done by Researchers or INFN/CNR personnel – not the regular academic Professors. The latter do not have motivation to teach Ph D courses. The school tries to solicit offers for courses</p>

			and this does not work well. An important question is how to get the Professors more involved in the Ph D program? Ph D teaching is on voluntary basis and not counted as part of the Professors' teaching load. The University and the Department should consider changing this policy and finding a way to reward staff that contribute to the School (including the Director and deputy Director).
PhD students training activities outside the University of Padova	5	3	From our meeting with the students we got the impression that they do go to schools and conferences in Italy and abroad, and are encouraged by the faculty to do this. A substantial fraction of the PhD thesis is based on the research work carried out at top international labs and Universities in Europe and the US. On the one hand these activities constitute the most desirable experience in a student's training – on the other hand such extended absence from Padova may have an adverse effect on the ability of the student to take the courses they need.
Vocational and academic recruiting	5	2	On the basis of data supplied by the Director of the School we feel that the education provided by the School gives the graduates an excellent competitive basis to look for positions in Academia and research organizations (such as the INFN). The weight of industrial positions in Italy seems quite low – perhaps there should be an effort to attract industries to interview interested students during their Ph D training.

**Do not fill in the third column if you did not provide any comment or suggestion to improve the quality of the PhD programs on the corresponding item of the first column. However, you are kindly requested to evaluate whether or not [rating scale: min 1 – max 3] the School accepted the suggestions you provided.*