

Guidelines for referee evaluation

Preface

The INFN Theory Group includes about 1300 researchers belonging to several INFN theory divisions located in Italian Universities and National Laboratories, and working in six main research areas: (1) field and string theory; (2) elementary particle phenomenology; (3) nuclear and hadronic physics; (4) mathematical methods; (5) astroparticle physics; and (6) statistical physics and applied field theory. The scientific activity is presently organized in 35 research projects called "Iniziativa Specifiche" (IS), aimed at fostering scientific collaborations and synergies among different research units located in two or more INFN theory divisions. Each IS can be defined as a team of researchers sharing objectives and common activities and employing similar or complementary approaches. The IS may, as well, gather together teams of researchers which use similar methods to address different problems.

One of the main duties of the INFN Theory Committee, which is formed by representatives of all the INFN theory divisions, is to assess every three years the quality of the research proposals of each IS, and to suggest updates or changes of their structure to improve the scientific impact. This assessment, which is performed with the help of external anonymous referees, is used for allocating the INFN post-doc grants and for the internal review process of the quality of research of INFN.

Each referee should assess the quality of the IS proposals within a given research area by answering 5 questions with a four-level grade (A = very good; B = good; C = fair; D = poor) justified by brief comments. These comments are very useful for the INFN Theory Committee in order to better understand the referee's evaluation, as well as to compare assessments of different IS's, or of the same IS by different referees.

For better information, after receiving the evaluations by two independent external referees, IS proposals are ranked according to the following levels:

-) level 1, with grades A and at most one grade B in total, considering both referee reports;
-) level 2, with grades A and at most two grades B in total, considering both referee reports;
-) level 3, with more than two grades B or C/D, considering both referee reports.

The referee's comments will be treated confidentially and the referee's identity will not be disclosed.

Questionnaire

1. Quality and relevance of the proposed research activity:

How relevant is the field of research at the international level? Does the project address important challenges in the field?

Please grade accordingly: (A=Very Good, B=Good, C=Fair, D=Poor)

Justification and comments:

2. Research plan, methodology and strategy:

Is the research plan clearly stated, soundly based and feasible? Are the (conceptual and technical) employed methods suitable?

Please grade accordingly: (A=Very Good, B=Good, C=Fair, D=Poor)

Justification and comments:

3. Project impact:

Does the project have the potential to improve the current state-of-the-art in the field?

Please grade accordingly: (A=Very Good, B=Good, C=Fair, D=Poor)

Justification and comments:

4. Research team qualification:

With regard to the scientific qualification of each Unit and its role in the development of the research project, how well designed and qualified is the research team to conduct the project?

Please grade accordingly: (A=Very Good, B=Good, C=Fair, D=Poor)

Justification and comments:

5. Global evaluation:

Taking into account of the four evaluations above, what is the overall scientific assessment of the IS?

Please grade accordingly: (A=Very Good, B=Good, C=Fair, D=Poor)

Please comment on specific points of strength and/or weakness