Reviewing Proposals and the Physics 595 Proposal Review Process

Inquisition Scene, by Francisco Goya, 1816

The Proposal Review Process

Why should you care about the proposal review process?

"Good proposal. We'll get back to you. We still have to hear from the cat."

You may be asked to review a proposal some day!

More importantly, knowing how proposals are evaluated will help you write successful proposals!

The Proposal Review Process

Examine the proposals critically, using the criteria provided by funding agency:

Most common 'scientific' review criteria:

Scientific content: What questions/problems does the proposed research plan to solve?

Significance/importance: Why is the research needed? How will the research advance knowledge?

Feasibility: Is the proposed research feasible? Can the problem be addressed in the timeframe and monetary size of the award?

Clarity: Are the proposal motivations, plans, and goals clearly stated?

Logical organization: Is the proposal logically organized and well written?

The Proposal Review Process

Examine the proposals critically, using the criteria provided by funding agency:

"My project is simply this. I want to find out once and for all whether there's any truth in the belief that money can't buy happiness."

Other "outreach/broad impact" criteria:

Education: How well does the project help integrate research and teaching?

Accessibility: Will the results be made available to a broad audience to advance science understanding?

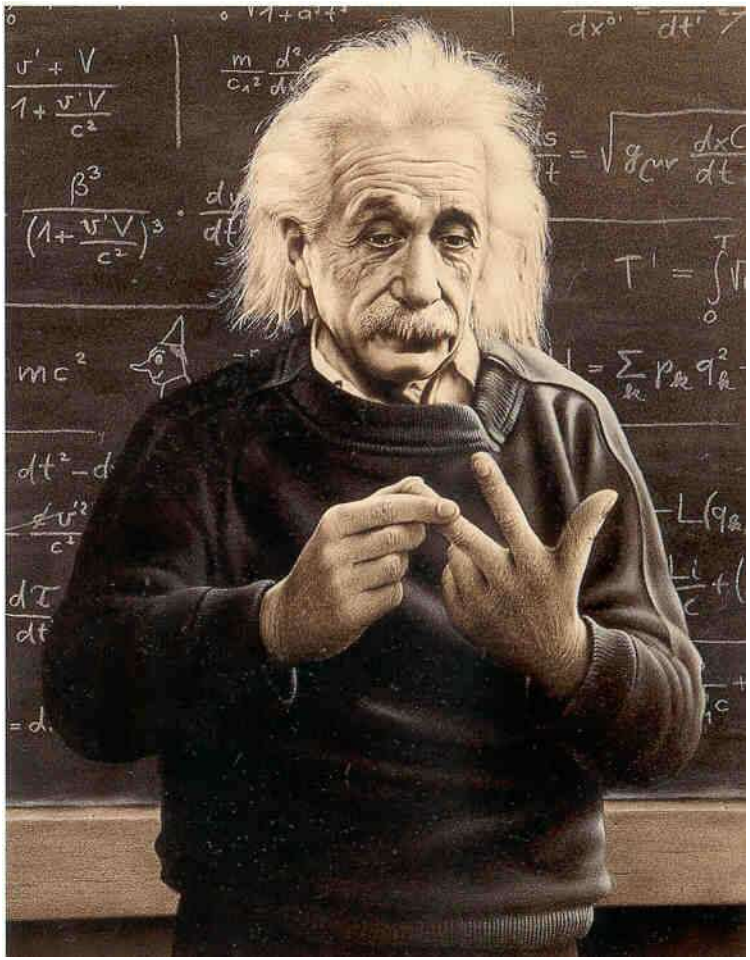
Underrepresentation: Does the research enhance the participation of underrepresented groups?

Societal impact: Are there any benefits of the work to society at large?

Interdisciplinarity: Does the work help advance interdisciplinary research?

The Proposal Review Process

Examine the proposals critically, using the criteria provided by funding agency:



Other issues that matter:

1: Does the proposal comply with the proposal preparation instructions?

2: Has enough detail been provided to allow adequate evaluation?

3: Is the research proposed "transformative"?

4: Have all parts of the proposal been included?

5: Is the budget well justified and adequate for the research proposed?

The Proposal Panel Review Process

Each proposal is generally reviewed (before the panel meets) by three or more of the panelists. External (mail) reviews may also be solicited.

The **Primary reviewer** gives background on the proposal and leads discussion of the proposal

The **Secondary reviewer** makes additional comments

The **Scribe** takes notes on the discussion

All the panelists can contribute to the discussion, and a final rating and summary of the discussion is decided upon by the entire panel

Phys 595 Proposal Review Timeline

Friday, April 14: Project Summaries are due

Friday, April 21, 5 p.m.: Proposals are due

Monday, April 24: I will e-mail you the proposals for which you are the primary and secondary reviewer

April 24 – 27: Read, and prepare written reports for, the two proposals for which you're responsible

By April 27: Project summaries for all proposals will be e-mailed to the class

Friday, April 28: Proposal panel review, 10 a.m. – 12 noon

Your Responsibilities as the Principal Investigator

Simple: include all elements of the proposal, and get the proposal in on time!

The Physics 595 Research Initiative
University of Illinois at Urbana-Champaign

Request for Proposals

The Department of Physics at the University of Illinois at Urbana-Champaign (PHYS/UIUC) announces an intensive 1-year program to provide opportunities for talented graduate students to participate in research. Prospective participants are invited to submit proposals for research projects for the 2023 program.

Project Summary "white papers" are due by 5:00 P.M. CST, April 14, 2023. Full proposals are due by 5:00 P.M. CST, April 21, 2023.
Proposals submitted after the deadline will not be considered.

The Initiative
The PHYS/UIUC Phys 595 research program provides resources to enable graduate students to undertake research projects in experimental, theoretical, and computational physics. Of particular interest are projects in condensed matter physics, materials science, theoretical biophysics, theoretical astrophysics, and experimental particle and nuclear physics. Proposed research projects should offer interesting, meaningful research that can be conducted without extensive background knowledge, in a 1-year time frame, and with a broad mix of appropriate techniques and methodologies. An ideal project will offer the student a chance to develop expertise in a particular area while learning techniques applicable to many areas.

Objectives of the Program
- Provide students with a meaningful experience in a first-class research environment.
- Enable students to work closely and directly with practicing researchers.
- Encourage students to develop their own "research literacy," including familiarity with the literature, oral and written communications skills, time management, and teamwork skills.

Terms
Grants are for a 1-year period, beginning August 1, 2023.

Grantees are required to provide a final presentation and a written report that:
- Summarize activities and results as they relate to the proposed objectives.
- Discuss the significance of the results.
- Recommend avenues for future work.

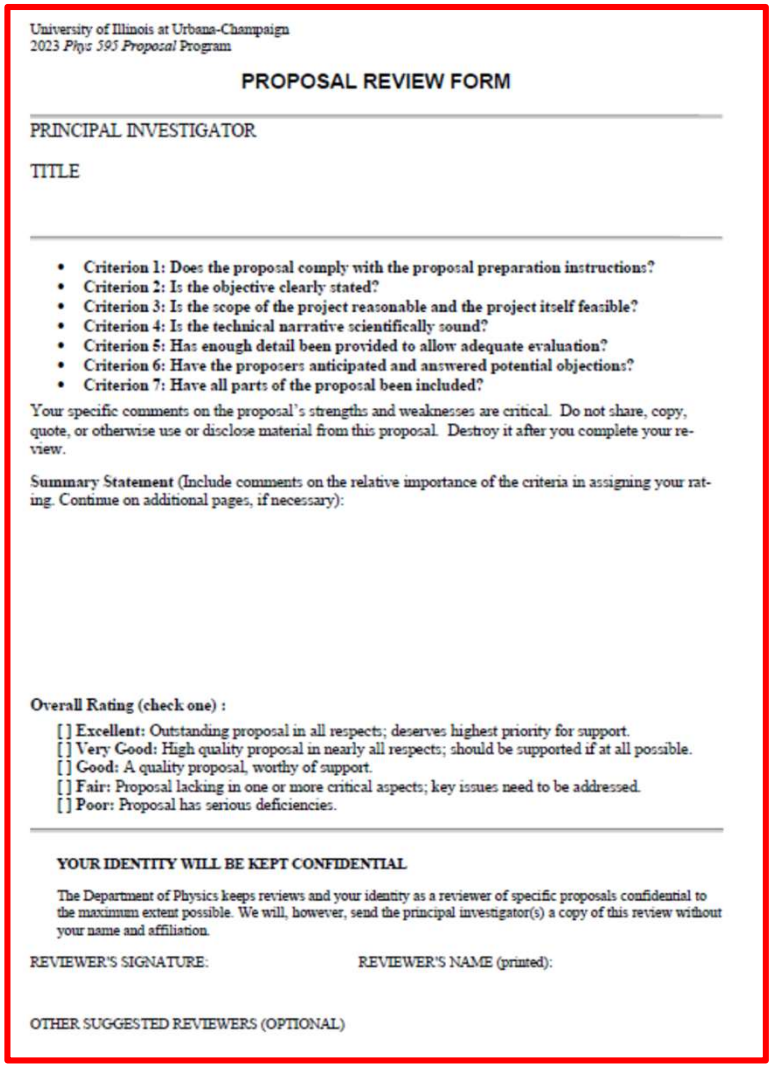
Grantees will participate in programmatic activities and group meetings during the 1-year grant period. Grantees are encouraged to participate in research-group and departmental seminars and colloquia.

Budget and Budget Justification
A maximum of $25,000 may be requested, of which $5,000 must be a student stipend. Other eligible expenses are equipment, materials and supplies, telecommunications, travel, publication/dissemination of results, and institutional overhead.

Institutional overhead is to be calculated at a rate of 52 percent of the modified total direct cost (MTDC) base. Student stipends and equipment costs are to be excluded from the MTDC.
A narrative budget justification of no more than one page must be included in the proposal.

Your Responsibilities as a Phys 595 Reviewer

Prepare a separate reports for proposals you're assigned



University of Illinois at Urbana-Champaign
2023 *Phys 595 Proposal* Program

PROPOSAL REVIEW FORM

PRINCIPAL INVESTIGATOR

TITLE

- **Criterion 1: Does the proposal comply with the proposal preparation instructions?**
- **Criterion 2: Is the objective clearly stated?**
- **Criterion 3: Is the scope of the project reasonable and the project itself feasible?**
- **Criterion 4: Is the technical narrative scientifically sound?**
- **Criterion 5: Has enough detail been provided to allow adequate evaluation?**
- **Criterion 6: Have the proposers anticipated and answered potential objections?**
- **Criterion 7: Have all parts of the proposal been included?**

Your specific comments on the proposal's strengths and weaknesses are critical. Do not share, copy, quote, or otherwise use or disclose material from this proposal. Destroy it after you complete your review.

Summary Statement (Include comments on the relative importance of the criteria in assigning your rating. Continue on additional pages, if necessary):

Overall Rating (check one) :

[ ] **Excellent:** Outstanding proposal in all respects; deserves highest priority for support.
[ ] **Very Good:** High quality proposal in nearly all respects; should be supported if at all possible.
[ ] **Good:** A quality proposal, worthy of support.
[ ] **Fair:** Proposal lacking in one or more critical aspects; key issues need to be addressed.
[ ] **Poor:** Proposal has serious deficiencies.

YOUR IDENTITY WILL BE KEPT CONFIDENTIAL

The Department of Physics keeps reviews and your identity as a reviewer of specific proposals confidential to the maximum extent possible. We will, however, send the principal investigator(s) a copy of this review without your name and affiliation.

REVIEWER'S SIGNATURE: REVIEWER'S NAME (printed):

OTHER SUGGESTED REVIEWERS (OPTIONAL)

Discuss the following features:

1: Overall scientific and technical merit—does the project address an important problem?

2. Strengths and weaknesses of the proposal

3: Feasibility—likelihood of success

4: Compliance with stated program objectives—will the project contribute to the funder's mission?

5: Adequacy of facilities and equipment to be used

6: Qualifications, capabilities, and experience of scientific personnel

7: Reasonableness of the project costs

Assign a rating or priority for funding

Your Responsibilities on the Phys 595 Proposal Panel

Reviewer Scoring
Spring 2023 Phys 595 Proposal Review Panel

Rate on a scale of 1 - 5 ranging from 1 = "poor, do not fund" to 5 = "excellent, must fund." You may assign fractional scores. Please add comments that can be shared with the proposal proponents.

Reviewer Name: _____

Proposal P.I.	Score	Comments
Shreya Arya		
Lalith Bonagiri		
Jenny Campbell		
Leah Espenhahn		
Joshua Feldman		
Albur Hassan		
Hyeonseok Jee		
Gautham Krishnan		
Yingkai Liu		
Tzu-Hsiang Lo		

Primary reviewers will lead discussion of their proposals

Secondary reviewers will make additional comments

All will contribute to the discussion, and panel ratings, for every proposal.

Important things to note:

Written reports and panel discussion summaries should be evaluative, but constructively worded, as the principal investigators will read these:

"Review unto others as you would have them review unto you."