



# Physics 496

## Introduction to Research

Lecture 10.0: Proposal Review

Ingredients: CME 50%, TML 50%

# Peer Review

One of the cornerstones of academic research is peer review.

We have already discussed it in the context of journal articles.

Proposals for funding are also peer reviewed.

But instead of reviewing work that has been completed, reviewers evaluate how realistic and important something that's not done might be.



# Proposal Review follows rules

When the funding agency sends out a proposal for review, they provide the criteria by which the proposal should be evaluated.

A good review addresses each of the points in the criteria.

This differs from a paper review because

- a) There's a budget.
- b) The work has not been done yet.
- c) There's a budget.



'The Proposal'

# Reviews often have multiple stages

- 1) Proposal is sent to qualified reviewers for a written report
- 2) A panel of qualified reviewers is assembled to comparatively review a (usually large) group of proposals.

Written reports from Step 1) are provided to the panel.

The panel rank-orders the proposals and provides recommendations for funding to the agency.

Sometimes panels are convened without step 1).

Panel reviews are a lot of work and responsibility.



# Your review

Your proposals are due Friday April 19 (next week!) by 6:30pm

Saturday April 20 you will receive your assignments for primary and secondary reviews ; make sure you can access all proposals in Box

Saturday, April 20 through Friday April 26 –

- Evaluate the two proposals for which you're responsible and prepare written reviews.
- Look over the other 21 proposals and make general notes of strengths and weaknesses

Friday April 26 – proposal panel review, 2-5 pm

# Your responsibilities as a reviewer



1. Examine each proposal critically and objectively, using the stated review criteria:
  - a. Does the proposal comply with the instructions?
  - b. Have all mandatory parts been included?
  - c. Is the objective clearly stated? Is the work plan clear?
  - d. Is the technical narrative scientifically sound?
  - e. Is the scope of the proposed work reasonable and the project feasible?
  - f. Has enough detail been provided to allow adequate evaluation?
  - g. Does the project meet the funding agency's objectives?

# Your responsibilities as a reviewer

2. Prepare a separate written report (1-2 pp) that discusses the following features
  - a. Overall scientific and technical merit – does the project address an important problem?
  - b. Specific strengths and weaknesses of the proposal – give examples.
  - c. Feasibility – is the project likely to be successful? If success is uncertain, is the possible payoff sufficient to justify the risk?
  - d. Compliance with stated program objectives – will the project contribute to the funder's mission?
  - e. Adequacy of facilities and equipment to be used.
  - f. Qualifications of scientific personnel.
  - g. Reasonableness of project costs.

# Your responsibilities as a reviewer

3. Assign a rating or priority for funding to each proposal.
  - a. Excellent – must fund.
  - b. Very Good – high-quality; should be funded.
  - c. Good – quality proposal; worthy of support.
  - d. Fair – proposal lacking in several criteria.
  - e. Poor – seriously deficient; do not fund.
  
4. During the panel review, lead the discussion for the proposals for which you were the primary reviewer.

During the panel review, everyone will contribute to the discussion and panel ratings for every proposal; bring your notes so you can participate.

# One last thing

Be constructive in your reviews! Written reports and panel discussions should be evaluative and specific but constructively worded – they will be given to the proposers.

