



Exhibit D

Format for LDRD Proposals

Preliminary Proposal

The Preliminary Proposal is a short one page document to be prepared by the Principal Investigator in consultation with their immediate line management Supervisor and the appropriate D/S/C Head. The Preliminary Proposal is intended to determine early in the process whether the PI will have expected time to conduct the proposed LDRD project and whether the scope of the proposed project fits within the ability of the D/S/C to provide necessary resources. The Preliminary Proposal will be reviewed by the LDRD Coordinator and the LDRD Selection Committee to determine early in the process whether the proposed scope of work fits within the guidelines of an LDRD Project per DOE O 413.2B.

The Preliminary Proposal should be approved and signed by the proposed Principal Investigator's immediate line management Supervisor, and the D/S/C Head or designee indicating a meeting of the minds on the scope of the proposed LDRD Project before the Full Proposal is prepared. The Preliminary Proposal consists of the following sections:

- 1. Project Title:** Provide a descriptive title for the proposed work.
- 2. Principal Investigator and Co-Investigators:** The name of the person proposing the LDRD project and the names of expected collaborators as Co-Investigators
- 3. Project Summary:** A short description of the proposed project and a description as to how the project meets the objectives of LDRD
- 4. Project Work Plan:** A short description of the project work plan and estimate of the scope of financial and human resources that will be required for the LDRD project
- 5. Comments or Questions:** An optional section that allows the proposed Principal Investigator to seek guidance from the LDRD Coordinator and/or Selection Committee.

Full Proposal

A full proposal consists of 14 items of information as described below and is limited to 6 pages. This page limit includes figures, but does not include Items 12-14 (references, budget table, and other commitments). The text of the summary must be single column, flush left, unjustified right margin, 12-pt Times New Roman with a 1" margin all around. The title and major section should be set in bold type. Use block paragraphs (no indentation) with a line space between each paragraph. The PI should convert the file to Adobe Portable Document (pdf) format when ready to submit it to the LDRD Coordinator, following approval by the appropriate D/S/C Head.

NOTE: Full proposals may be submitted in response to an Invitation for Full Proposals (during the LDRD Annual Call for Proposals) or as Late-Start or Strategic-Hire proposals.

**Exhibit D (page 2)****Format for LDRD Proposals**

- 1. Header: Fermilab LDRD Proposal**
- 2. Project Title:** Provide a descriptive identifier for the proposed work; avoid short titles that can be confused with other work; avoid abbreviations.
- 3. Principal Investigator:** Only one person may be designated as the principal investigator: see the *LDRD Project Requirements* document for discussion on who may be the Principal Investigator of an LDRD project.
- 4. Lead Division/Sector/Center:** This is the “home” Division/Sector/Center of the Principal Investigator.
- 5. Co-Investigators:** List Fermilab research staff members and non-Fermilab subcontractors who will charge time to the project account. University faculty who will collaborate on the project at no cost may also be included.
- 6. Proposed Fiscal-Year and Total Budgets:** Indicate fiscal-year operating budgets and the total project budget being requested; include Laboratory overhead factors. Also, include a requested contingency amount and justification. The budget should be prepared in consultation with the D/S/C Field Financial Manager.
- 7. Initiative:** Indicate the LDRD topics or initiatives to which the proposal responds.
- 8. Project Description:** Summarize in 150-200 words the scientific/technical objectives of the proposal, methods that will be used, and expected deliverables and their expected impact. This description should be understandable to a technically literate lay reader.
- 9. Significance (about 1-2 pages):** Describe the scientific/technical problem that the proposal addresses, explain why this problem is significant, and introduce your novel approach for addressing this problem. Include a critical comparison of your proposed approach with the latest published work and explain how your project would advance the state of the art and influence its field of research. Begin with the “big picture” and funnel the reader to the significance of the specific problem addressed in the proposal.
- 10. Research Plan (about 3-4 pages):** Provide a brief overview of your research plan and your specific objectives or aims. For each objective/aim, provide a section with the following:
 - a. State the objective/aim
 - b. Describe the scientific hypotheses to be tested or technical concepts to be demonstrated to achieve the objective/aim.
 - c. Discuss the methods, materials, facilities, protocols to be employed, and techniques for analyzing data and validating results as appropriate.
 - d. Describe the expected results and impact (e.g., fundamental breakthroughs, enabling technologies)
 - e. Provide a deliverable(s) for year one (within the first year of funding), year two (if seeking a multi-year project), and at the completion of the project.

**Exhibit D (page 3)****Format for LDRD Proposals****11. Future Funding (about ½ page):**

- a. Describe how your results will be disseminated; include likely journals in which your work would be published and conferences, workshops, and planning activities at which the work would be presented.
- b. List the probable future funding sources (sponsors), including DOE programs, other agencies, state agencies, or private sector investment.
- c. For each probable funding source:
 - i. Explain how the sponsor would benefit from the pursuit of this work.
 - ii. Discuss probable contacts with sponsors and plans for responding to current and planned proposal calls.
 - iii. Estimate the likelihood that the sponsor would provide future funding including anticipated range of such funding.

12. References (not included in 6-page limit): Cite a concise set of relevant literature that supports the scientific/technical significance of your project and the innovativeness of your proposed methodologies.**13. Resource Availability and Recent LDRD Funding (not include in 6-page limit):**

- a. Discuss scientific or technical obligations of the investigators that may limit the available time for working on the LDRD project (e.g., other funded research, participation in scientific committees, etc.); use units of FTE's to estimate the time
- b. List other LDRD commitments of the investigators; include both current (funded projects) and pending (new proposal) commitments; use units of FTE's to estimate the time
- c. Summarize accomplishments of funded LDRD projects for the last five years (include project title, investigators, and year of project)

14. Budget Table (not included in 6-page limit): The last page of the proposal consists of a completed budget table. In the budget table, include a cost breakdown for each objective/aim discussed in the Research Plan. There is no specific budget limitation, but keep in mind that the LDRD funding has limited resources. If subcontracting work, it should be clear in the proposal what work is being subcontracted and justified why that work is not able to performed within Fermilab.