# The title should be written in bold Arial 14 and centered

## Names of principal campaign participants should be in Times New Roman 11 and centered, as e.g.:

## H.B. Good1, R. Better2,3, A. Best3, etc. with campaign lead underlined

### Affiliations should be formatted with Times New Roman 9 and centered as below:

### 1Department/Research Institute, University

### 2Department/Research Institute, University

### 3Department/Research Institute, University

### E-mail: email@campaign lead

LCLS Science Campaign proposals must be responsive to the parameters, guidelines, and objectives outlined in the specific request for LCLS Science Campaign proposals.

All Science Campaign Proposal content (except for references) should fit on **eight pages**, written in Times New Roman 11, single-spaced, and aligned in mode “justify”. Please make sure to set the following margins: top, bottom, right: 1.0”(2.5 cm); left: 1.0” (2.5 cm).

Use the following six main sections, and include additional numbered subsections as needed to enhance the readability of the proposal.

###### 1. Abstract

Brief overview of the proposal, emphasizing the science objectives, expected impact, and comprehensive nature of the proposed program. Abstract length should be 250 words or less.

###### 2. Science Motivation, Objectives, and Expected Impact

This section should provide a strong scientific motivation for the proposed work (including any brief background information). It should clearly define the main objectives and the expected scientific impact of the proposed work if successful. Note that the scientific impact of the proposed program must be significant, and widely appreciated by a reasonably knowledgeable scientific audience. The scope and potential impact must be beyond a Standard PRP Proposal, and with a high chance of success.

*Will the proposed sequence of experiments result in a qualitative advance on an important science challenge?*

###### 3. Justification for a Series of Beamtimes, Experimental Plan and Feasibility

Provide a clear justification for a series of beamtimes with well-defined scope and objectives. Clearly define the milestone objectives to be accomplished in each beamtime. A clear case should be made for how each major step in the proposed program advances toward the larger goal of the campaign. This section should include a description of the experimental methods or procedures to be used, and an assessment of the feasibility. Note that well-established methods should not be described in detail (cite relevant references), but novel methods should be explained.

*What scientific advance will be accomplished, how, by whom, and over what period of time?*

*Could this be accomplished through a Regular Proposal?*

*What is the likelihood of success?*

###### 3.1 Specific Experimental Plans for Initial Run Period

Describe the specific experimental plans for the beamtime(s) requested for Run 20.

###### 4. Campaign Team

Note that the strongest proposals will be comprised of a well-rounded team providing all the essential expertise to make a significant scientific advance, for example incorporating experiment experts, synthesis, theory, data analysis etc. Note that the size of the team, or the number of members with common expertise and interests are not the most important criteria.

|  |  |  |  |
| --- | --- | --- | --- |
| **Team Member** | **Institution** | **Project Role** | **Experience** |
|  |  |  | *enter relevant letter – see examples below* |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

[A] *Prior publications with LCLS*

[B] *Prior experience at LCLS or other XFEL*

[C] *Prior synchrotron experience*

[D] *Theory*

[E] *Synthesis*

[F] *(other relevant experience - please define)*

###### 5. LCLS Partnership

Outline the unique capabilities and expertise of LCLS that are required. Successful campaigns should represent a close partnership with the LCLS facility as evidenced by strong involvement of LCLS/SLAC staff. Outline other essential needs for a successful campaign, and how these needs will be met (e.g. other facilities, personnel, expertise, resources, sample synthesis, sample characterization, sample delivery testing etc.)

*Why is LCLS essential for the proposed campaign?*

*Why is this in the strategic interest (scientific and/or technical) of LCLS?*

*Who will be the main LCLS (or SLAC) staff contributing to this effort, what are their expected contributions, and what is the extent of the discussions with staff to date?*

###### 6. Additional Information

You have the option to provide any additional information you think may be useful to assess this Science Campaign Proposal. A comprehensive campaign may include key elements that are not directly related to LCLS, and this should be elaborated in this section. This may include for example: sample synthesis, prior characterization, sample delivery testing; theory development that may guide experiments; experiments using other methods that may be a critical complement to the proposed LCLS experiments (e.g. synchrotron, table-top laser etc.).

*Are all the other essential elements for success identified and arranged?*

**Parameter Table for Run 20**

Include a simple, brief table (one page or less) of the most important relevant parameters for the proposed experiments in Run 20. This does not count toward the eight page Science Campaign Proposal limit.

*Example (modify as needed):*

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Value** | **Comment** |
| LCLS Instrument(s) Requested |  |  |
|  |  |  |
| X-ray photon energy (range) |  |  |
| X-ray pulse energy on sample |  |  |
| X-ray focus |  |  |
| X-ray pulse duration |  |  |
|  |  |  |
| Optical laser photon energy (range) |  |  |
| Optical pulse energy on sample |  |  |
| Optical laser focus |  |  |
| Optical pulse duration |  |  |
|  |  |  |
| Time resolution (need for ATM?) |  |  |
|  |  |  |
| Energy scanning |  |  |
|  |  |  |
| Sample delivery |  |  |

**Relevant Funding**

Briefly identify any relevant funding that supports this work (e.g. a related grant from DOE or other agency). This does not count toward the eight page Science Campaign Proposal limit.

**References**

All references should be included in two pages. These do not count toward the eight page Science Campaign Proposal limit.