

Application Package: Cover (1-page template); Executive Proposal Summary (1-page template); Facility Experimental Configuration Summary (2-page template, required for the first round); Project Narrative (5-page limit); Bibliography and References Cited; Biographical Sketches for the PI and up to 5 additional key team members; and Funding Sources. Merge into one (1) PDF. 3-slide summary as one (1) PPT.

CMAP Proposal Cover Page

| |
|---|
| Proposal Title: |
| Project Topic Area: |
| Principal Investigator (PI): (Name, Institution, Address, Telephone and Email address) |
| Project Team: (list the names, citizenships, institutions, email addresses of PIs and collaborators who would participate in the proposed experiment and describe their roles) |

CMAP Executive Summary Sheet

| |
|--|
| <p>Proposed Project Objectives: (A single paragraph describing the science to be addressed, expected impact, and the need for Omega to pursue the science.)</p> |
| <p>Experimental Approach: (A single paragraph describing the experimental method, existing platform to be used, or if new capabilities will be required.)</p> |
| <p>Laser Facility Requirements: (OMEGA, OMEGA EP, or joint; number of laser beams, total energy, peak power, pulse shape, delays, etc.)</p> |
| <p>Number of Shot Days: (Number of requested shot days and expected number of shots.)</p> |
| <p>Target Types: (Hohlraums, capsules, planar, expected materials in the targets, gas-filled/vacuum targets, number of targets, etc.)</p> |
| <p>Diagnostic Required: (TIM-based and fixed-port diagnostics, new diagnostics if any.)</p> |
| <p>New Developments Required: (Laser capabilities, diagnostics, targets, etc.)</p> |

Facility Experimental Configuration Summary (2-page limit)
[required for first round]

Facility Required: OMEGA 60 Beam OMEGA EP Joint (OMEGA/OMEGA EP)

Laser Beam Configuration:

OMEGA Drive:

Pulse shape: _____ (If new, the design must be received by LLE two months in advance of planned shots):

Number of Beams: _____

Energy (per beam, power setting, or kJ on target): _____

Number and Type of Distributed phase plates (DPP's): _____

OMEGA Backlighter:

Pulse shape: _____ Energy: _____ Drivers: _____

Beams: _____

DPP's: _____ Pointing: _____ Delays: _____

2 ω or 3 ω or 4 ω probe beam (if required): _____

OMEGA EP:

(Specify the required mode for each beam, i.e, short pulse, short pulse co-prop, UV or T-OPA)

| Beam | Circle | Requested Configuration | Pulse shape/width | Energy (J) |
|------|--------|----------------------------|-------------------|------------|
| 1 | UV | IR Short-Pulse Sidelighter | _____ | _____ |
| 2 | UV | IR Short-Pulse Backlighter | _____ | _____ |
| 3 | UV | _____ | _____ | _____ |
| 4 | UV | _____ | _____ | _____ |

Primary Diagnostics:

TIM based: _____

Fixed: _____

Modifications to existing diagnostics: _____

New diagnostics (please describe): _____

Target Requirements:

If hohlraum or half-hohlraum specify:

Axis: _____

Scale size: _____

Material and thickness: _____

If spherical specify:

Diameter/thickness: _____

Materials: _____

Fill gas (DT or DD, or special fills): _____

If other types of target, please describe: _____
(For EP, all components not expected to survive the shot, driven or otherwise, must be identified including scale, to determine if the OAP disposable debris shield will be required)

Target Fabrication:

Total number: _____

Standard target: Yes No

Targets supplied by: _____

Hazardous materials: _____

Target positioner (list all required, fixed and/or TIM-based): _____

Targets contain Z>36 material: (Yes/No)

Spectrometer in use: (Yes/No)

Safety Related Concerns: Yes No

If YES, please describe: _____

(List and describe any safety concerns that may arise with samples you will examine, equipment you will use, or techniques you will perform, including any physical, chemical or biological hazards, and how these issues will be addressed.)

Schedule Request (for shots in FY23 only, by quarter):

(If your proposal is selected for a beam-time award, please specify your scheduling preference.)

Additional Space for Responses (indicate which questions you are addressing):