

**MAP Statement of Work
FY12
UCLA**

Total: \$144K (6 months)

SWF: \$134K

Engineers: ___ FTE
Technicians: ___ FTE
Scientists: ___ FTE
Post Docs: ___ FTE
Students: ___

Institution to provide

M&S: \$10K

M&S Usage:

- (i) MAP-related travel, including MICE operations.

Description of Work:

MAP funds at UCLA are focused on muon collider design studies. Activities include simulations of muon collider cooling channels, including cooling rings and the 40 T final cooling channel. Other work includes optimization studies for high-power MC/NF targets and energy deposition in collider ring magnets.

Milestones [Description; deliverable; delivery date]:

1. Do production and optimization studies for a gallium target for the MC/NF; report; Q2.
2. Create a systematic algorithm for studying matching between stages of the 40 T final cooling channel; report; Q2.
3. Optimize performance of the dipole-solenoid cooling ring by examining variations in the RF and absorber parameters; report; Q2.

Approvals [Name, Date]:

D. Cline
Institutional Representative

S. Geer
MAP Director