Facilities, Equipment and Other Resources for Postdoctoral Fellowship: AAPF: Building modern models of convection in massive stars

No special facilities or equipment are required to carry out the work in this proposal. Office space will be provided to me by KITP / UCSB, and all work can be carried out on a laptop and external monitor which I will purchase using my fellowship research allowance.

Supercomputing resources will be required to complete the proposed simulations. I will have access to the ETS Supercomputing unit at UCSB, through which I will have access to national supercomputing resources (these have included SDSC and NSF XSEDE resources) as well as the HPC@UC program which could provide up to 1 million cpu-hours per year. I will collaborate with Prof. Bildsten to obtain NSF ACCESS resources for any additional supercomputing resources I require to complete the proposed work.

Regarding my education plan, CSEP will handle recruitment of high school students into the SST program and will coordinate required facilities. My work will therefore focus on module development, facilitation, and publication, all of which can be performed at KITP or in UCSB classrooms.