Contribution ID: **3** Type: **not specified**

Superradiant THz radiation generation at XFEL

STERN (Superradiant THz radiation generation) is a project funded by the European XFEL to develop and provide a high-power terahertz source to enable pump-probe science with the existing high-power X-ray beam. This evasive region of the electromagnetic spectrum has a wide range of applications facilitating the exploration of life and matter science. STERN will use both diffraction targets and waveguides to generate broad- and narrowband radiation. The summer student will have several responsibilities including the production of novel high-frequency waveguides using atomic-layer deposition, the development of an experiment to characterize the waveguides, and simulation efforts. The student will have the option of working with high-power lasers and should be comfortable with some coding language like python.

Group

M - MXL

Project Category

B3. Research on Accelerators

Special Qualifications

Coding in python

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