

Workshop Charge, Objectives and Output:

- Facilitate the exchange of ideas and foster collaborations that link sharp science questions with relevant nonlinear X-ray methods, leading to proposed new experiments or programs at LCLS
- Identify most compelling (near-term) chemical science opportunities exploiting nonlinear X-ray methods
 - Focus on answering important questions, or significantly advancing an area of science, beyond demonstration experiments
 - What can be done with existing and planned LCLS instruments and capabilities with LCLS-II?

- What are future compelling science areas, beyond present capabilities, exploiting nonlinear X-ray methods?
 - Outline a roadmap to get there

What are the gaps and approaches to bridge them? e.g.:

- ❖ Feasibility assessment, notional experimental approach/design
- ❖ First-step experiments
- ❖ Instrument/method development etc.

Workshop Output:

- We will write a Workshop Report outlining priority research opportunities you would have highlighted during the meeting. Please provide half a page to one page regarding your contribution. Use word font 11, times new roman and include figures if possible.

- The Report audience are: BES program managers, LCLS/SLAC Director, Stanford Dean.