Call for Proposals for Proton Radiography Beam Development Time For the 2021 Run Cycle

The pRad project leader has some discretion to schedule beam development days for work on things such as detector development, dark field radiography, tomography, and other techniques that will benefit the pRad capability. To facilitate scheduling high-priority beam development requests, requestors should provide a detailed description of the work, per the guidance below, and submit it to Kathy Prestridge, kpp@lanl.gov, by Friday February 5, 2021. Scientists outside the core team may request development time, but their proposal must be coauthored by a pRad team member. Development time does not include dynamic experiments, e.g., with high explosives, gun, or pulsed power. Those experiments must be proposed through the LANSCE call for proposals and reviewed by the pRad Program Advisory Committee (PAC).

Proposals will be ranked on the following:

- 1. Potential for benefit to the pRad capability.
- 2. Feasibility of execution with existing beamline components.
- 3. Feasibility of fitting into dynamic experiment schedule, based on beamline configuration and time requested.
- 4. Potential for publication of results.

Please submit a 1-2 page proposal with the following information:

- 1. Title, authors
- 2. Beamline configuration (air gap/vessel, collimators, mounting devices, detectors)
- 3. Range of requested time, from minimum time needed to optimal, e.g., half a day to two days. Please include setup time in that estimate, and if weekend setup time could be used, if available. If the experiment can be run parasitically, please explain how this might be done, and what type of entries need to be made during operations.
- 4. Include a description of equipment that you will need to use or purchase for these experiments, especially if it would streamline development time.
- 5. Earliest time you would be ready during the run cycle (from mid-June to end December 2021).
- Scientific description, including type of measurements needed, intent of measurements, impact of proposed measurements, benefit to the capability, and potential for publication of results, including previous publications made from similar work.