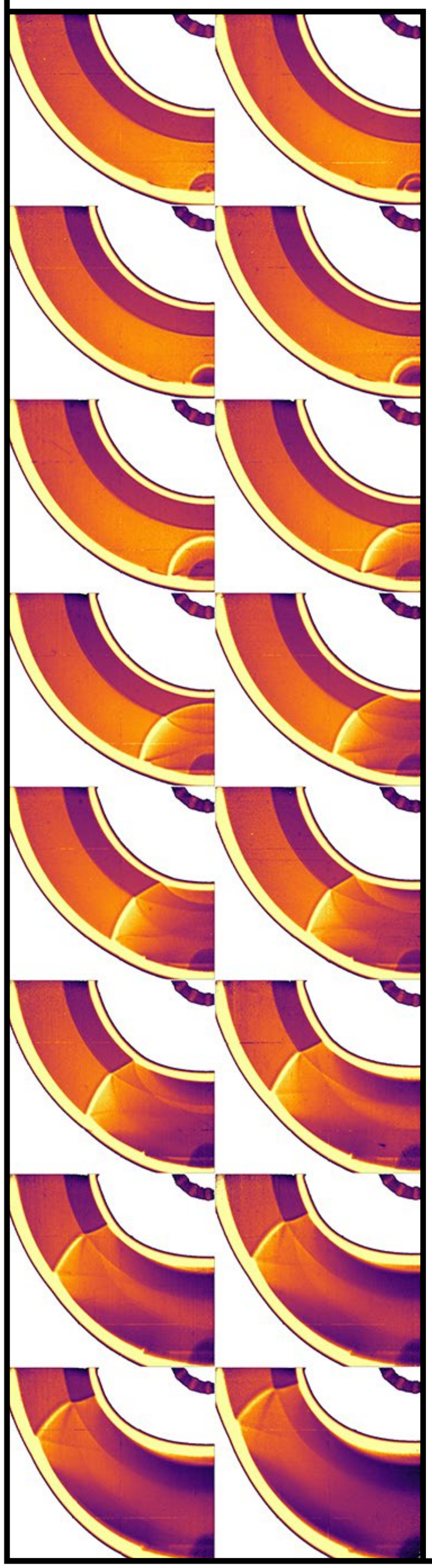
LANSCE Futures Spring 2021 Workshop Series

developing the technical case for cutting-edge science at the NNSA-supported LANSCE endstations to 2050 and beyond

Workshop 1 of 4: Dynamic Radiography



Dynamic Radiography | Apr 5 - 6 | registration open

Scattering Science | Apr 21

Nuclear Science | May 10 - 11

Area A Futures | May 31 - Jun 1

LANSCE is presently positioned at the forefront of radiographic capabilities for mid-scale, focused dynamic experiments. The needs for characterizing an aging stockpile, as well as the validation of new weapons designs, drive the need to enhance the capabilities of existing radiographic probes, through increased dynamic range, depth of field, spatial and temporal resolutions, as well as through accompanying, complementary probes capable of constraining equations of state.

Abstracts and presentations on topics that can potentially advance the dynamic radiographic capabilities of LANSCE are solicited for a day and a half-long workshop on April 5 and 6, 2021. Potential topics include:

proton radiography:

- multiple axes
- achromatic lens development
- new magnifying lenses
- higher energy proton radiography
- dark field or new collimation schemes
- proton time-of-flight imaging
- magnetic field imaging
- camera and detector development
- new drivers (pulsed power, actinide gun, light gas gun, or other)

secondary imaging-based diagnostics:

- X-ray and phase contrast imaging
- electron radiography
- optical imaging
- neutron radiography for pre-shot statics
- dynamic CT and multi-view imaging
- pre-shot statics w/ complementary information

and **other topics** pertinent to dynamic radiography at LANSCE.

Visit tinyurl.com/lansce to register.

For abstract submission, please e-mail msf@lanl.gov.

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