

# GEOLOGICAL MATERIALS FROM PROCESSING TO PERFORMANCE

A CHESS 2030 WORKSHOP

# July 13-14, 2021

An interdisciplinary workshop on ways to leverage and advance x-ray tools for time-resolved and in-situ studies for structural, engineering, and geological materials.

### Workshop will feature sessions on:

### Materials and systems:

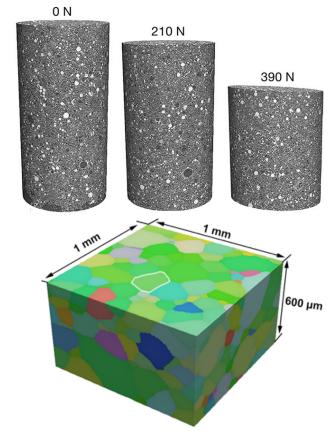
- Additive manufacturing
  - Ceramics
  - Cements
    - Metals
- Rocks and geological materials

### **Experimental tools:**

- High-energy x-ray diffraction microscopy
  - X-ray powder diffraction
  - Micro-computed tomography
- Single-bunch time-resolved imaging and diffraction

### Computational tools:

- Machine learning
- Workflows for big data
- On-the-fly data reduction and pre-processing



## Featuring invited presentations by:

Allison Beese (Pennsylvania State University)
Armand Beaudoin (University of Illinois Urbana-Champaign)
Amy Clarke (Colorado School of Miines)
Florian Fusseis (University of Edinburgh)
Todd Hufnagel (Johns Hopkins University)
Brian Jensen (LANL)
Rachel Lim (Pennsylvania State University)
Jonathan Lind (LLNL)
Atieh Moridi (Cornell)
Sriramya Nair (Cornell)

Steve Niezgoda (Ohio State University)

Thien Phan (NIST)
Reeju Pokarel (LANL)
Tresa Pollack (UC Santa Barbara)
Brian Schuster (University of Texas El Paso)

**REGISTER TODAY!**