

SACLA Users' Meeting 2023

Breakout Sessions

Breakout Sessions

Japan Standard Time (JST)	10:15 – 12:00 March 3
Greenwich Mean Time (GMT)	01:15 – 03:00 March 3
Pacific Standard Time (PST)	17:15 – 19:00 March 2

Session A:

Experimental Capabilities with Synchronized Laser System
~ Femtosecond and Nanosecond Optical Lasers~

Session B:

Experimental Capabilities with High-power Nanosecond Laser System
~ Capability Extension to Platform with High-power Nanosecond Laser ~

A:

Experimental Capabilities with Synchronized Laser System

Organizers:

M. Suzuki (Kwansei Gakuin Univ.)
T. Togashi and S. Owada (SACLA)

SACLA has been promoting the advanced, robust, and stable operation of optical laser systems. This breakout session aims to discuss the capabilities of time-resolved experiments combined with femtosecond or nanosecond optical lasers. In the initial part of the session, a beamline scientist informs participants about the current status of optical lasers at SACLA. Then, pioneering users present their recent activities on the time-resolved experiments. We welcome participants to join the discussion to expand the unique capabilities of the time-resolved experiments at SACLA.

Program

10:15-10:20

Introduction

Time-resolved experiments using XFEL (tentative)
M. Suzuki (Kwansei Gakuin Univ.)

10:20 - 10:45

Facility talks

Recent progress in the optical lasers at SACLA
T. Togashi (SACLA)

Recent progress in the optical lasers at LCLS
T. Sato (LCLS, tentative)

10:45 - 11:30

User talks

Recent activities of “atomic, molecular and optical” research fields
and requests for facilities (tentative)
M. Fushitani (Nagoya Univ.)

Recent activities of biology research fields and requests for facilities (tentative)
E. Nango (Tohoku Univ.)

Exciting magnetic materials with XFEL
K. Yamada (Tokyo Inst. Tech.)

11:30 - 12:00

Discussion

Chair: M. Suzuki (Kwansei Gakuin Univ.)

B:
Experimental Capabilities with High-power Nanosecond Laser System

Organizers:

S. Takagi (Carnegie Institution for Science)
K. Miyanishi (SACLA)

This breakout session discusses the capability extension to the experimental platform with a high-power nanosecond laser at SACLA. Representative users present their new attempts. Then, a beamline scientist shares recent progress and plans to extend the laser and the diagnostics capabilities. Finally, a round table discussion takes place at the session's end. Participants are strongly encouraged to provide feedback, suggestions, or recommendations.

Program

10:15-10:20

Introduction

Brief introduction of the experimental platform with high-power nanosecond laser
K. Miyanishi (SACLA)

10:20-11:05

Users' new attempts

Ultrafast X-ray heating of shock-compressed samples
N. J. Hartley (SLAC)

Development of X-ray emission spectroscopy
for studying shock-induced spin transition in iron-bearing minerals
A. Amouretti (Osaka University)

Ultrafast X-ray imaging and diffraction of shock-induced ejecta in Sn and Ce
J. Hu (SWUST)

11:05-11:20

Facility report

Updates and plans of the experimental platform with high-power nanosecond laser
K. Miyanishi (SACLA)

11:20-12:00

Round table discussion

Chair: S. Takagi (Carnegie Institution for Science)