

Workshop on Laboratory Astrophysics: Novel Development in Nonlinear Plasma Physics with Lasers

NASA/CXC/Rutgers/J.Hughes et al.

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Date: September 2, 3 2020
Place: Central Terrace Salon, Osaka University
Zoom: will be announced soon
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Agenda September 2

14:00 Opening Ryosuke Kodama (Osaka University)
14:10 “Weibel-instability mediated shock experiment, Youichi Sakawa (Osaka University) **invited**
15:10 “Experimental investigations on the shock reformation” Shuichi Matsukiyo (Kyushu University)

Break

16:00 “Research status of laboratory astrophysics on Shenguang facilities” Jiayong Zhong (Beijing Normal University) **invited**
16:30 “Local and global observations of magnetic reconnections driven by electron dynamics” Kentaro Sakai (Osaka University)
17:00 “Astrophysical plasma jet” Akira Mizuta (Riken)
17:30 Discussions

September 3

9:00 “Bifurcation phenomena on magnetic island in magnetically confined toroidal plasma” Katsumi Ida (NIFS) **invited**
9:45 “How strong can zonal flow be?” Zensho Yoshida (University of Tokyo) **invited**
10:30 “Induced Compton scattering in current high-power laser facilities” Shuta Tanaka (Aoyama gakuin University)
11:00 “Wakefield excitation and associated particle acceleration in astrophysical shocks” Masanori Iwamoto (Kyushu University)
11:30 “Controlled injection of relativistic ions in wakefield acceleration” Shogo Isayama (Kyushu University)

Lunch Break

14:00 “Ultrafast dynamics of shocks and giant magnetic fields in intense laser-solid interactions” Ravindra Kumar (Tata Institute of Fundamental Research) **invited**
14:30 “Large Area Suspended Graphene as Target for Laser-Ion Acceleration” Wei Yen Woon (National Central University) **invited**
15:00 “Converging Shock-induced Blow-off Acceleration (CSBA): Towards laser acceleration of protons at nearly the speed of light” Yuji Fukuda (KPSI/QST)
15:30 “Small Angle X-ray Scattering of sub-micron rod-assembly target at SACLA” Masato Ota (Osaka University)

Break

16:30 “Let you challenge your imagination” Hideaki Takabe (Osaka University) **invited**
17:30 Discussions
18:00 Closing

Youichi Sakawa and Hideaki Takabe receive the John Dawson Award for Excellence in Plasma Physics Research in 2020 from American Physical Society. We celebrate this and bring interdisciplinary expertise to share and discuss the next novel development in nonlinear plasma physics. The workshop is supported by JSPS Core-to-Core Program.