

3rd International Symposium on Kumamoto Synchrotron Radiation (ISKSR3): Data Analysis and Data-Driven Science

Sponsor: International Research Organization for Advanced Science and Technology (IROAST), Kumamoto University

Co-sponsor: Kumamoto University Advanced Research Project A “Precise atomic level structure observation and physical property of condensed matter under extreme condition”

Date and Time: **30 November 2016 (Wed), 10:20 am – 5:00 pm (tentative)**

Place: C122 Lecture Room, Faculty of Science, Kumamoto University

Address: 2-39-1 Kurokami, Chuo-ku, Kumamoto 860-8555, Japan

Scope

We are planning to build a new synchrotron radiation (SR) beamline (Kumamoto University MAcro-MOlecular Nano- Pico-Time-Resolved BeamLine, KUMAMON-PTR-BL) at Saga Light Source in Tosu, Japan. This symposium is the third *international* scientific meeting concerning the SR related scientific area.

Recent developments of SR and X-ray free electron laser facilities produce remarkable progresses in the quality of experimental data. In conjunction with them, new varieties of the data sets appear, such as two-dimensional images etc. and the corresponding data volumes explosively increase. The present task for researchers is how to extract scientifically valuable information from the experimental data of huge size in quantity but of still insufficient in quality. Thus, combined and integrated works of solid-state physics and computer science are essential for the data analysis using e.g., Inverse problem, Bayesian inference with Metropolis' algorithm (reverse Monte Carlo modeling) and some others. Furthermore, the data-driven science such as Sparse modeling is a very promising tool for handling the data.

For this symposium, we invited five distinguished researchers who are investigating such data analyses and data-driven science. Some other young scientists also present their own works concerning the data analysis and data-driven science.

Program

Chair: S. Hosokawa

10:20-10:30

Opening address by Prof. T. Hiyama (Director of IROAST, Kumamoto University)

10:30-11:10

Prof. Laszlo Pusztai, Invited (Hungarian Academy of Sciences)

11:10-11:50

Dr. Shinji Kohara, Invited (NIMS/SPRING-8)

11:50-12:10

Dr. Jens Rüdiger Stöhlhorn (Department of Physics, Kumamoto University)

(Lunch and Poster session)

Chair: F. Shimojo

14:00-14:40

Prof. Koji Hukushima, Invited (The University of Tokyo)

14:10-14:50

Prof. Ichiro Akai, Invited (Institute of Pulsed Power Science, Kumamoto University)

14:50-15:10

Dr. Kazunori Iwamitsu (Department of Physics, Kumamoto University)

(Break)

Chair: I. Akai

15:30-16:10

Dr. Tomohiro Matsushita (JASRI/SPRING-8) Invited

16:10-16:30

Dr. Tomotaka Nakatani (RIKEN/SPRING-8)

16:30-16:50

Dr. Yoichi Nakajima (Department of Physics, Kumamoto University)

16:50-17:00

Closing remarks

Participants: Poster presentations

Mr. Shingo Aihara (Department of Physics, Kumamoto University)

Mr. Yuki Ideguchi (Department of Physics, Kumamoto University)

And some others.

Important deadlines (Temporary)

28 October 2016 Submission of Titles and Author lists for Oral presenters

20 November 2016 Registration of poster presenters with Titles and Author lists

20 November 2016 Submission of Abstracts (A4 one page, pdf file, Format free)

Please send to hosokawa@sci.kumamoto-u.ac.jp

Organizers

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