

YIPQS long-term workshop

Mean-field and Cluster Dynamics in Nuclear Systems

2022 (MCD2022)

[http://www2.yukawa.kyoto-u.ac.jp/~mcd2022/
mcd2022@yukawa.kyoto-u.ac.jp](http://www2.yukawa.kyoto-u.ac.jp/~mcd2022/mcd2022@yukawa.kyoto-u.ac.jp)

Second Circular

Dear Colleagues,

The long-term international workshop on "Mean-field and Cluster Dynamics in Nuclear Systems" (MCD2022) will be held at Yukawa Institute for Theoretical Physics (YITP), Kyoto University, Japan, during 9 May - 17 June 2022. In this workshop, we focus on low-energy nuclear physics. This workshop is planned as one of the series of long-term workshops sponsored by the Yukawa International Program for Quark-Hadron Sciences (YIPQS).

The week of 23-27 May is assigned to a symposium entitled "Developments of Physics of Unstable Nuclei (YKIS2022b)". This symposium belongs to a series of Yukawa International Seminar (YKIS), which has been one of the main international activities of YITP since 1978, held annually with selecting topics from all fields of physics.

Schedule & Venue

The period of the long-term workshop MCD2022 is 9 May – 17 June 2022, and the period of 23 – 27 May is a symposium week entitled YKIS2022b.

The workshop will be held at the Panasonic hall at the Yukawa Institute for Theoretical Physics, Kyoto University. The access information can be found here:

<https://www.yukawa.kyoto-u.ac.jp/en-GB/contents/guide/map>

To Kyoto, it takes about 1.5 hours from the KANSAI International airport (KIX) by train and 2.5 hours from Tokyo using the Shinkansen train.

Topics

- a. Mean-field aspects of nuclear structure and reactions
- b. Cluster aspects of nuclear structure and reactions
- c. Their cooperative and competitive phenomena

Registration

A registration fee is not required. The online registration can be done here:

http://www2.yukawa.kyoto-u.ac.jp/~yipqs.project/form_e.php?id=571

until 25 March 2021.

Style of the workshop

Every weekday we expect a few seminars. Basically, all the participants have assigned desks, and discussion and collaborations among participants are encouraged. We have six weeks, and roughly, we plan to allocate the 1st and the 2nd weeks to the cluster physics and the reaction physics, and the 4th, 5th, and 6th weeks to the mean-field and the shell model. But this is not strict and the mixture of the specialists of both cluster and mean-field is one of the most important motivations of the workshop. See below for the 3rd week.

The detailed schedule including the list of participants will be available on the conference website.

YKIS2022b (Symposium week)

The 3rd week is the symposium week called YKIS2022b. The series of YKIS has been one of the main international activities of YITP since 1978. The symposium is held annually, covering all fields of physics. In the next year, we discuss the physics of unstable nuclei, and the symposium is entitled "Developments of Physics of Unstable Nuclei (YKIS2022b)". The invited speakers of YKIS2022b are as follows; A. Afanasjev (Mississippi), P. Capel (Mainz)*, P. Descouvemont (Brussels), W. Dickhoff (St. Louis), R. de Groote (Leuven), J. L. Egido (Madrid), G. Hagen (Oak Ridge)*, M. Kimura (Hokkaido/RIKEN)*, E. G. Lanza (Catania), S. M. Lenzi (Padova)*, J. Meng (Beijing), T. Nakamura (Tokyo Tech), P. Navratil (TRIUMF), N. Nishimura (RIKEN), A. Obertelli (Darmstadt)*, T. Otsuka (RIKEN), Z. Ren (Tongji), K. Sekizawa (Tokyo Tech), D.

Seweryniak (ANL)*, S. Shimoura (CNS), A. Tamii (Osaka), T. Uesaka (RIKEN), A. Volya (Florida State), D. Vretenar (Zagreb), and K. Yoshida (Kyoto). [*: TBC]

The oral presentations will be selected from the submitted one-page abstracts (pdf format). The abstract should be submitted to mcd2022@yukawa.kyoto-u.ac.jp by 30 January 2022.

Online participation/presentation

We would like you to come to Kyoto as long as you can, and strongly recommend the domestic participants to do so, but the online presentation is an option in case you cannot. It also depends on the situation of COVID-19.

For information provided by the Japanese government, visit the following URL:

https://www.mofa.go.jp/p_pd/pds/page22e_000910.html

Hotel reservation

You can reserve a hotel by yourself. The following webpage may help you:

<https://www.yukawa.kyoto-u.ac.jp/en-GB/contents/guide/hotels>

We also have block reservation at Hotel Gimmond Kyoto, and the guesthouse of YITP is available. If you prefer to stay at Hotel Gimmond Kyoto or the guesthouse of YITP, please inform us by sending an e-mail to the workshop address:

mcd2022@yukawa.kyoto-u.ac.jp

Important Dates

The deadline for abstract submission for YKIS2022b: 30 January 2022

The registration deadline: 25 March 2022

MCD2022: 9 May – 17 June 2022

YKIS2022b: 23 -27 May 2022

International Advisory Committee

Carlos Bertulani (Texas A&M), Gianluca Colo (Milan), Pierre Descouvemont (Brussels), Jacek Dobaczewski (York), Emiko Hiyama (Tohoku/RIKEN), Calvin Johnson (San Diego), Denis Lacroix (Orsay), Antonio Moro (Seville), Takashi Nakatsukasa (Tsukuba), Witold Nazarewicz (MSU), Zhongzhou Ren (Tongji), Luis M. Robledo (Madrid), Peter

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