The First KMI School:
"Dark Matter" (Feb. 28th to Mar. 2nd, 2018)
--First circular--

The Kobayashi-Maskawa Institute for the Origin of Particles and the Universe (KMI) was established on 2010 at Nagoya University in order to explore new frontiers of modern physics beyond the Standard Model. KMI decides to launches the KMI school in 2018, to which we invite distinguished researchers to KMI to have them give their lectures on specific topics every year. The KMI school is intended for graduate school students and young post-docs. We would like you to encourage young members in your groups to join in the KMI school.

The first KMI school will be held with a topic "Dark Matter". Dark Matter is one of the biggest mysteries in physics. The existence of Dark Matter is identified from astrophysical observations while its nature has been hidden in a veil. The hypothesis that Dark Matter is unknown elementary particles produced in the early universe is quite interesting. Many researchers, including our members in KMI, are intensively searching for the signatures from viewpoints of elementary particle physics as well as astrophysics. Thus, Dark Matter is a proper topic of the fist KMI school. We will hold the first KMI school as follows:

Dates: Feb. 28th to Mar. 2nd, 2018
Venue: KMI Science Symposia (ES635) in Nagoya University
Programs:
    1) Two lecture and one tutorial courses (titles are tentative)
        Lecture: Particle dark matter
            Lecturer: John Ellis (King's collage in London)
        Lecture: Astrophysical observations of dark matter
                Lecturer: Joseph Silk (University of Oxford)
        Tutorial: Introduction of DarkSUSY
                Lecturer: TBC

2) Three seminars

    Indirect searches for dark matter with gamma rays and
other messenger

        Speaker: Hiro Tajima (Nagoya Univ.)

    Hydrogen 21cm line and dark matter

        Speaker: Kiyotomo Ichiki (Nagoya Univ.)

    Dark matter direct detection experiments

        Speaker: TBC

3) Poster session.

We encourage participants to present their research results at the poster session in the KMI school. We will not limit their topics to Dark Matter. The best presentation will be selected among them, and we will award the presenter a prize.

Maximum of number of participants:

100 (due to the capacity of the lecture hall).

Registration fee:

We ask the participants to pay only the registration fee for the banquet.

Financial supports:

Domestic transportation and local expenses may be supported for limited numbers of participants.

Important days:

First circular: Early September 2017

Second circular: October 2017

Homepage opens: October 2017

Registration starts: October 2017

Deadline of registration: December 31th, 2017

Miscellaneous:

1. Videos for lectures will be available on the KMI webpage after the KMI

school.

2. DarkSUSY is a fortran package for supersymmetric dark matter calculations. It is frequently used in phenomenological studies of dark matter.

http://www.darksusy.org

We will ask the participants to bring laptop on which DarkSUSY is installed. The details will be informed later.

3. Homepage for the KMI school will be posted on KMI homepage

http://www.kmi.nagoya-u.ac.jp/index-e.php

Best regards,

Junji Hisano

On of the Organizing Committee of KMI School