

ILAS Special Seminar at Kansai Seminar House 2020

To mainly KU Undergraduate students and International undergraduate students from partner Universities, (Graduate students are also welcomed)

We would like to invite you to an exclusive seminar by a prominent university professor which will be held for two days (Feb 19 ~ Feb 20, 2020) at Kansai Seminar House, located near Shugakuin Rikyu. The seminar will be carried out in English.

※With his/her application to this seminar, the content for publication of the photos and the video film will be regarded to be given by the applicant.

Theme: *How to measure things*

Lecturer: Prof. Dr. Masao Kitano (Executive Vice-President of Kyoto University)

<Message from the lecturer>

Today, it's considered a matter of course that when we want to measure the length of a thing, we do so based around the unit of 'meters'.

Indeed, activities such as measuring various quantities, recording them as numbers and sharing them socially can be dated back to ancient civilization (or even earlier), and the practice of measuring has accumulated throughout our long history.

The accuracy of measurements has also been improved dramatically thanks mainly to the ongoing development of science and technology; these days, a tiny distortion in a minute space - for instance 10 to the - 17 meters - can be detected by using a state of the art gravitational wave interferometer.

Furthermore, continuous efforts have been made to standardize unit quantities for measuring devices throughout history, and since 2019 several basic units have become definable utilizing quantum-level observation.

In this seminar, we will conduct various small-scale experiments in groups to better comprehend and experience the diverse attempts of mankind to understand the essence of how to measure things (several concepts on measurements)



Wikipedia



International Measurement Conference

Dates: Feb. 19. (Wed.) ~ 20. (Thu.) 2020

Participants: 40 students

Total forty students (KU students and international students from partner Universities) plus two faculty members, supported by some TAs.

*If the number of applicants exceeds capacity, participants will be chosen by lottery.

Application: January 9 (Thu.) ~27 (Mon.), 2020

Please apply from i-arcc portal site "ILAS Special Seminar at Kansai Seminar House 2020" by Jan. 27.

Announcement of selected participants: Jan. 31 (Fri), 2020

All applicants will receive emails with the result of the selection (or lottery). Since some cancellations are to be expected, a waiting list will be issued.

All participants are offered free of charge as follows:

- Accommodation (Kansai Seminar House at Shugakuin)
- Transportation (round trip between Kansai Seminar House and Kyoto University by a chartered bus)
- Breakfast of the second day.



Cost to be paid by students:

- Dinner of the first day and lunch of the second day: **JPY 3,300**

*Dinner and lunch fee (JPY3,300) will be collected before the program. We will inform participants of the due date and where to pay this fee by email on Jan. 31, 2020. If it is not paid by the due date, your participation will be canceled.

《Cancellation policy》 ※Be sure to read!

If a participant calls off his/her participation for any reason, inform us without fail by the cancellation form or email (even on the morning of departure)

to: iarcc-ka@mail2.adm.kyoto-u.ac.jp

Please note that **if you cancel after Monday, February 17, fees for the dinner and lunch (JPY 3,300) will not be refunded.**

If you cancel without giving prior notice as requested above, you may be refused participation in similar events in the future. Since there may be many applicants waiting for a cancellation, please let us know as soon as possible when you decide to cancel.

The detailed schedule is as follows:

February 19, Wed.	
8:45	Meet in front of Yoshida-South Campus Building No.1 ※Be punctual
9:00	Departure
9:30~12:00	On arrival, move to the seminar room. Lecture: Quantity and numbers (Comparison, Euclidean algorithm and continued fraction)
12:00~13:00	Lunch (bring your own lunch)
13:00~15:00	Practice: Measurement of weight (to measure in groups and to developed a quantification method.)
15:00~16:30	Lecture: Meanings of units
16:30~18:00	Move to own rooms with your belongings, free time until dinner
18:00~19:00	Dinner
19:00~21:00	Presentation and Discussions
February 20, Thu.	
8:00~9:00	Breakfast
9:00~10:00	Group photo session, pack up your belongings and check-out (keys to the reception)
10:00~12:00	Practice: Measurement of length and speed (to understand the method of defining length by velocity of light)
12:00~13:00	Lunch
13:00~14:00	Lecture: Structure of unit system (especially regarding to the 2019 redefinition of SI)
14:00~16:00	Final Discussion
16:30	Departure
17:00	Arrival at Kyoto University