

ICTP-KIAS School on Statistical Physics for Life Sciences



31 October - 8 November 2022
Seoul - Republic of Korea

Further information:
<http://indico.ictp.it/event/9836/>
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Activity Secretary: E. Sarnataro

The 2022 ICTP-KIAS School on Statistical Physics for Life Sciences aims to introduce the next generation of students and researchers to these important themes: the quantitative understanding of life sciences, machine learning, and data science from the perspective of modern statistical physics. In addition to the pedagogical lectures, the school includes a small workshop for sharing recent research progresses among scientists at the frontier of this field.

The school aims at providing unique opportunities for (junior) scientists in the Asia Pacific region to learn modern statistical physics and its applications to quantitative life science, machine learning, and data science. The 2022 ICTP-KIAS School will contribute to the cross-fertilization between physics and biology as well as to long-term scientific collaborations between researchers in Asia and ICTP scientists.

Topics:

Information theory, machine learning and statistical physics

- Statistical mechanics of machine learning
- Information theory and criticality
- Statistical mechanics and reasoning

Out-of-equilibrium statistical physics and life

- Biochemical rhythms and thermodynamics
- Non-equilibrium thermodynamics
- Information thermodynamics
- Stochastic thermodynamics

How to apply:

Online application:
<http://indico.ictp.it/event/9836/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Directors:

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(KIAS, Seoul, Republic of Korea)
Junghyo Jo
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ICTP Scientific Contact:

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Speakers:

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Junghyo Jo (Seoul National Univ)
Antonio Celani (ICTP)
Kunihiko Kaneko (Niels Bohr Institute) Online
Tetsuya Kobayashi (Univ of Tokyo)
Hyunggyu Park (KIAS)
Yongju Baek (Seoul National Univ)
Yong Woon Kim (Korea Advanced Institute for Science and Technology)
Jae-Hyung Jeon (Pohang University of Science and Technology)
Depk-Sun Lee (KIAS)
Vipul Periwal (NIH)
Pankaj Mehta (Boston Univ)
Takahiro Sagawa (Univ of Tokyo)
Leihan Tang (Hong Kong Baptist Univ)

Deadline:

31 August 2022



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