



2025 Graduate Open House (Online) Department of Physics, The University of Tokyo

3pm (JST), July 5th, 2025.

Last Updated on June 17, 2025

**2025 Program (July 5, 2025) will start at 3pm (Tokyo)
= 2pm (Beijing) / 11:30am (New Delhi) / 8:00am (Frankfurt) /
11:00pm-1day (San Francisco) / 2:00 am (New York).**

Zoom link: available with registration.

*The recorded materials will be available later with this registration.

Program

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|---------------|---|---|
| 15:00 – 15:30 | Opening and an overview of Department of Physics at Univ. of Tokyo | Prof. Haozhao Liang, Department of Physics |
| 15:30 – 15:45 | Graduate programs, scholarships, and application processes | Prof. Haozhao Liang, Department of Physics |
| 15:45 – 15:55 | Break (Q&A) | |
| 15:55 – 16:05 | Welcome messages from graduate students | 2 international graduate students in Department of Physics |
| 16:05 – 16:25 | Q&A | |
| 16:25 – 16:30 | Break | |
| 16:30 – | Individual Zoom Meeting | Organized by each faculty |

The participating faculty members are listed in the next page.

Most of them will hold “Individual Zoom Meeting” at 16:30.

The Zoom links of those meetings are also available with registration.

| | Faculty Name (alphabetical) | Affiliation | Research Topic |
|----|--------------------------------|---|---|
| 1 | Kipp CANNON | Research Center for the Early Universe | Astrophysics using gravitational-wave observations. |
| 2 | Koichi HAMAGUCHI | Department of Physics | Theoretical Particle Physics (physics beyond the Standard Model of Particle Physics and its application to cosmology, such as Baryogenesis, Dark Matter and its signatures, and Inflation). |
| 3 | Yoshitaka ITOW | RCCN, Institute for Cosmic Ray Research | Neutrino oscillations and dark matter search in Super-Kamiokande and future Hyper-Kamiokande |
| 4 | Kentaro KITAGAWA | The Institute for Solid State Physics | High-pressure experiments on superconductivity and quantum magnetism, and development of new measurement methods including solid-state quantum sensing |
| 5 | Takeshi KONDO | Institute for Solid State Physics | Condensed matter experiments using angle-resolved photoemission spectroscopy (ARPES) to explore quantum materials (such as topological insulators, strongly correlated systems, Weyl magnets, magnetic skyrmions, and devil's staircase compounds) with a focus on electronic structure, spin textures, and ultrafast dynamics. |
| 6 | Kuniaki KONISHI | Institute for Photon Science and Technology | Research of micro- and nano-scale artificial structures with new optical phenomena (metasurface) and physics of laser processing |
| 7 | Akito KUSAKA | Department of Physics | Observational cosmology, primarily through cosmic microwave background and quantum sensing |
| 8 | Haozhao LIANG | Department of Physics | Quantum many-body theories and applications to nuclear and cold-atom physics |
| 9 | Yuta MICHIMURA | RESCEU, University of Tokyo | Experimental gravity. Exploring the nature of gravity through gravitational wave observations using large-scale laser interferometers and through small-scale experiments that explore new laws of physics. |
| 10 | Yasuhiro NAKAJIMA | Department of Physics | Particle and astroparticle physics experiments with neutrinos |
| 11 | Takayuki SAITO | ICRR | TeV gamma-ray astrophysics using CTAO and photo-detector development |
| 12 | Synge TODO | Department of Physics | Computational physics: development of advanced computational methods, such as MCMC, tensor networks, statistical machine learning for strongly correlated many-body systems, and quantum computation |
| 13 | Masahito YAMAZAKI | Department of Physics | string theory and mathematical physics |
| 14 | Masashi YOKOYAMA | Department of Physics | Particle physics experiments focusing on neutrino oscillations and proton decay, using Super-Kamiokande and Hyper-Kamiokande |
| 15 | Yijin ZHANG | Department of Physics | Quantum physics in nanomaterials |