

# **Physics in LHC and Beyond**

**Thursday, 12 May 2022 - Sunday, 15 May 2022**

**Matsue (Japan) with ONLINE**

## **Scientific Program**

Not only physics but also latest detector, trigger, data-analysis technology are discussed covering the present LHC, future LHC/colliders and non-collider experiments. Ongoing studies and new ideas for the future experiments are welcome.

- SM Higgs, top, EW, B-physics
- SUSY, Dark matter, Axion, Other BSM
- Detector/Accelerator/Trigger tech.
- Data-analysis tech. (Machine learning, Quantum Computer, etc.)

The invited speakers are listed below. We also call for abstracts (CFA).

We encourage early career scientists from theory, experiment and other fields.

The detail information about CFA can be found in the "Call for Abstracts" menu.

Invited speakers (alphabetical order):

- Patrizia Azzi (INFN-Padova) ... Future collider physics prospect (HL-LHC, FCC etc.)
- James Cline (McGill) ... EW baryogenesis (theory)
- Andreas Crivellin (Zurich/CERN) ... Flavor physics (theory)
- Sven Heinemeyer (Madrid) ... SUSY + g-2 (theory)
- Lukas Henrich (CERN) ... ML at HEP
- Moritz Hütten (ICRR, UTokyo) ... Indirect DM search exp.
- Alejandro Ibarra (Munich Tech U.) ... Dark matter (theory)
- Akimasa Ishikawa (KEK) ... B-factory and flavor exp.
- Daniel Jeans (KEK) ... Future collider physics prospect (ILC, muon collider, C3 etc.)
- Seiji Kawamura (Nagoya Univ.) ... Gravitational exp.
- Shingo Kazama (Nagoya Univ.) ... Direct DM search exp.
- Kenji Kiuchi (UTokyo) ... CMB exp.
- Tsutomu Mibe (KEK) ... Muon g-2 exp.
- Klaus Moning (DESY) ... LHC Physics (BSM search)
- Yuta Nakashima (Osaka Univ.) ... ML for science
- Kazunori Nakayama (Tohoku Univ.) ... Detection of Axion, Magnon, Phonon via excitation in matter (theory)
- Niko Neufeld (CERN) ... DAQ
- Jiro Nishinaga (AIST) ... Next generation silicon detector
- Tatsumi Nitta (ICEPP, UTokyo) ... Quantum Sensor
- Masami Ouchi (UTokyo, NAOJ) ... Observational cosmology (galaxy formation etc.)
- Ryosuke Sato (Osaka Univ.) ... Axion (theory)
- Pierre Savard (Toronto) ... LHC Physics (measurement/EFT etc.)
- Claude Vallee (CPPM) ... Beam dump exp.
- Jean-Roch Valery Vlimant (CalTech) ... Quantum Computing
- George Wei-Shu Hou (National Taiwan Univ.) ... Extended Higgs (theory)
- Masashi Yokoyama (UTokyo) ... Neutrino exp.
- Akira Yamamoto (KEK) ... Superconducting magnets etc. for next-generation accelerators