

**AI meeting in KOREA**

# Since 2019

- We have tried to understand the uprising field of AI for the High Energy Physics...

# Particle Physics in Computing Frontier

Dec 9 – 13, 2019  
IBS  
Asia/Seoul timezone



Overview

Timetable

Registration

Participant List

Location

Support

✉ [wjdgus06@ibs.re.kr](mailto:wjdgus06@ibs.re.kr)

Data from particle physics is unique and challenging due to its tremendous size and complicate structure coming from quantum nature.

The goal of the focus-workshop is to explore novel techniques for the future exploration of BSM physics in Energy Frontier, including exciting developments in the field of machine learning and quantum computing.

The structure of the workshop will be designed to survey the core questions in new physics searches and to stimulate intense discussion/collaboration among the participants. In addition to the invited talks, there also will be lectures about the main themes of the workshop.

## Invited speakers

- Spencer Chang (Oregon U.)
- Yang-Ting Chien (Stony Brook)
- Suyong Choi (Korea U.)
- Barry Dillon (Stefan Inst.)
- Felipe Ferreira (U. of Aveiro)
- Dorival Goncalves (Oklahoma U.)
- Claudius Krause (Fermilab)
- Seung J. Lee (Korea U.)
- Sung Hak Lim (KEK)
- Tao Liu (HKUST)
- Yuichiro Nakai (TD Lee I.)
- Chris Rogan (Kansas U.)
- David Shih (Rutgers)
- Yuhsin Tsai (Maryland U.)

## Special talks

- Joonwoo Bae (KAIST, EE): **Computing Based on Quantum Principles**
- Eunsol Kim (Kakao Brain): **Large-scale image/video understanding via symbolic scene graphs**

# AI and Quantum Information Applications in Fundamental Physics

Feb 12 – 18, 2023  
Konjiam Resort  
Asia/Seoul timezone

Enter your search 

Overview

Timetable

Contribution List

My Conference

My Contributions

Registration

Participant List

Venue

Contact

Data from particle physics is unique and challenging due to its tremendous size and complicated structure stemming from its quantum nature.

The goal of this focus-workshop is to develop techniques for the future exploration of new physics by exploring exciting developments in the fields of machine learning and quantum computing with quantum information.

The structure of the workshop is designed to address core questions in new physics searches and to facilitate intense discussion/collaboration among participants.

## Invited Speakers

- Machine Learning:

- Suyong Choi (Korea Univ.)
- Barry M. Dilllon (Univ. Heidelberg)\*
- Aishik Ghosh (UC Irvine)
- Gregor Kasieczka (Hamburg Univ.)
- Claudius Krause (Univ. Heidelberg)
- Yung-Kyun Noh (Hanyang U. / KIAS)
- David Shih (Rutgers Univ.)

- Quantum Computing / Quantum Machine Learning:

- Jack Araz (Durham Univ. IPPP)
- Andrea Delgado (Oak Ridge National L.)\*
- Marat Freytsis (Rutgers Univ.)
- Daniel K. Park (Yonsei U.)

# AI and Quantum Information Workshop for Particle Physics

< Quantum Information · Quantum Computing · Machine Learning >

November 14(Tue)-17(Fri), 2023

Yang Seungtaik Auditorium (E9 Building), KAIST (Nov 14-16)

Room #304, IBS Science Culture Center (Nov 17)



## Invited Speakers

Jack Y. Araz	Jefferson Lab.	Anindita Maiti	Perimeter Institute
Eric Chitambar	UIUC	Yung-Kyun Noh	Hanyang University
Lukas Heinrich	TUM	Michael Spannowsky	IPPP, Durham
Michael A. Kagan	SLAC	Jesse R. Stryker	LBNL
Yingying Li	USTC	Sangwoon Yoon	KIAS-AI

# And Now

## Focused workshop on AI in High Energy Physics

Jan 6 – 7, 2025  
Asia/Seoul timezone

Enter your search 

### Invited Speakers

- K.C. Kong (University of Kansas)
- Sung Hak Lim (IBS-CTPU)
- Kazuki Sakurai (Warsaw University)
- David Shih (Rutgers University)
- Sangwoon Yoon (KIAS AI Center)
- Ramon Winterhalder (University of Milan)
- Andrea Wulzer (Barcelona, IFAE / ICREA, Barcelona)
- **and young researchers (to be announced)**

# And Near Future

## AI+HEP in East Asia

Feb 24 – 28, 2025

IBS

Asia/Seoul timezone



### Overview

[Call for Abstracts](#)

[Registration](#)

[Participant List](#)

[Maps and Directions](#)

[Visa Information](#)

[Code of Conduct](#)

### Notes:

- Please ignore any emails from 3rd party companies, as we do not have any contract.
- Connections to this website from overseas may be slow due to the IBS firewall. Sorry for the inconvenience.

This regional workshop aims to connect researchers in East Asia working in the interdisciplinary field of Artificial Intelligence and High Energy Physics (AI+HEP). The main topics covered include machine learning for particle theory, phenomenology and experiments, astrophysics and cosmology, as well as HEP tools for AI theory.

The workshop will have invited plenary talks, contributed presentations, and ample time for discussions. Both domain experts and those who are interested in exploring the field are welcome to participate, especially postdocs and graduate students. The goal is to foster a regional research community and to stimulate more collaborations.

### Organizing Committee:

- Tianji Cai (SLAC)
- Sung Hak Lim (CTPU-PTC, IBS)
- Huilin Qu (CERN)

### Advisory Committee:

- Mihoko M. Nojiri (KEK)
- David Shih (Rutgers)

# Notice

- For registered people, we will have a lunch together @ 12PM (just follow me, a restaurant inside KIAS).
- Tomorrow, we will have a banquet, supported by CERN-KOREA Theory.



**Let's start**