

# 第二届量子计算与高能物理研 讨会

## Report of Contributions

Contribution ID: 1

Type: **not specified**

## 欢迎致辞

*Friday, 31 March 2023 08:30 (10 minutes)*

**Presenter:** Prof. 陈莹 (中科院高能所)

**Session Classification:** Session 1

Contribution ID: 2

Type: **not specified**

## 量子计算优越性及近期应用

*Friday, 31 March 2023 08:40 (40 minutes)*

**Presenter:** Prof. 吴玉林 (中科大)

**Session Classification:** Session 1

Contribution ID: 3

Type: **not specified**

## 量子计算发展以及应用现状

*Friday, 31 March 2023 09:20 (40 minutes)*

**Presenter:** Dr 李蕾 (本源量子)

**Session Classification:** Session 1

Contribution ID: 4

Type: **not specified**

## Quafu 云平台的使用

*Friday, 31 March 2023 10:00 (40 minutes)*

**Presenter:** Dr 王正安 (中科院物理所)

**Session Classification:** Session 1

Contribution ID: 5

Type: **not specified**

## 高能物理量子计算云平台

*Friday, 31 March 2023 10:55 (15 minutes)*

**Primary author:** BI, Yujiang (IHEP)

**Presenter:** BI, Yujiang (IHEP)

**Session Classification:** Session 2

Contribution ID: 6

Type: **not specified**

## 量子机器学习在 LHC 和 CEPC 数据分析中的一些应用

*Friday, 31 March 2023 11:10 (25 minutes)*

**Presenter:** Prof. 周辰 (北京大学)

**Session Classification:** Session 2

Contribution ID: 7

Type: **not specified**

## 量子机器学习在高能物理数据处理中的应用研究

*Friday, 31 March 2023 11:35 (25 minutes)*

**Presenter:** Prof. 李腾 (山东大学)

**Session Classification:** Session 2



Contribution ID: 8

Type: **not specified**

## 量子机器学习的算法优化

*Friday, 31 March 2023 12:00 (25 minutes)*

**Presenter:** Prof. 章宇 (曲靖师范学院)

**Session Classification:** Session 2

Contribution ID: 9

Type: **not specified**

## 规范场的量子计算实现

*Friday, 31 March 2023 13:30 (25 minutes)*

**Presenter:** Prof. 宫明 (中科院高能所)

**Session Classification:** Session 3

Contribution ID: 10

Type: **not specified**

# Improved Hamiltonians for Quantum Simulations of Gauge Theories

*Friday, 31 March 2023 13:55 (25 minutes)*

**Presenter:** Prof. 李英英 (中科大)

**Session Classification:** Session 3

Contribution ID: 11

Type: **not specified**

## QCSH: 原子核壳模型的全量子计算包

*Friday, 31 March 2023 14:20 (25 minutes)*

**Presenter:** Prof. 魏世杰 (北京量子信息研究院)

**Session Classification:** Session 3

Contribution ID: 12

Type: **not specified**

# Analog Quantum Simulation Based on Superconducting Quantum Processor

*Friday, 31 March 2023 14:45 (25 minutes)*

**Presenter:** Dr 孙政杭 (中科院物理所)

**Session Classification:** Session 3

Contribution ID: 13

Type: **not specified**

## **Noise-resilient phase estimation with randomized compiling**

*Friday, 31 March 2023 15:10 (25 minutes)*

**Presenter:** Dr 顾炎武 (北京量子信息研究院)

**Session Classification:** Session 3

Contribution ID: 14

Type: **not specified**

## 利用量子生成对抗网络实现量能器快速模拟的可行性研究

*Friday, 31 March 2023 15:50 (25 minutes)*

**Presenter:** Dr 黄晓忠 (中科院高能所)

**Session Classification:** Session 4

Contribution ID: 15

Type: **not specified**

## 量子机器学习为了未来对撞机 (Tracking 和 Q-GAN)

*Friday, 31 March 2023 16:15 (25 minutes)*

**Presenter:** OKAWA, Hideki (IHEP)

**Session Classification:** Session 4



Contribution ID: 16

Type: **not specified**

## Feasibility study of Quantum particle Transformer

*Friday, 31 March 2023 16:40 (15 minutes)*

**Primary author:** MOHAMMED, Abdualazem (Institute of High Energy Physics)

**Presenter:** MOHAMMED, Abdualazem (Institute of High Energy Physics)

**Session Classification:** Session 4

Contribution ID: 17

Type: **not specified**

## **Symmetry enhanced quantum imaginary time evolution and its application to field theory**

*Friday, 31 March 2023 16:55 (25 minutes)*

**Presenter:** Dr 王啸洋 (北京大学)

**Session Classification:** Session 4