非摂動的場の理論の進展と今 後の課題 **2025 (YITP-W-25-02)**

Report of Contributions

Contribution ID: 1 Type: not specified

Recent Advances in Field Theory for Nuclear Theory

Thursday, May 22, 2025 10:00 AM (45 minutes)

Primary author: HIDAKA, Yoshimasa (YITP)

Presenter: HIDAKA, Yoshimasa (YITP)

Session Classification: Session

Contribution ID: 2 Type: not specified

Beyond the plateau ~ next challenges in LQCD

Thursday, May 22, 2025 10:45 AM (45 minutes)

Primary author: HASHIMOTO, Shoji

Presenter: HASHIMOTO, Shoji

Session Classification: Session

Contribution ID: 3 Type: not specified

Optimized two-hadron operators in lattice QCD

Thursday, May 22, 2025 12:00 PM (45 minutes)

Primary author: Dr LYU, Yan (RIKEN iTHMES)

Presenter: Dr LYU, Yan (RIKEN iTHMES)

Session Classification: Session

Contribution ID: 4 Type: **not specified**

What I'd like to know about lattice gauge theories in various dimensions

Thursday, May 22, 2025 2:00 PM (45 minutes)

motivated by recent developments in CFT and Bootstrap

Primary author: NAKAYAMA, YU (Yukawa Institute of Theoretical Physics)

Presenter: NAKAYAMA, YU (Yukawa Institute of Theoretical Physics)

Session Classification: Session

Contribution ID: 5 Type: **not specified**

Gravity and Lattice

Thursday, May 22, 2025 2:45 PM (45 minutes)

Primary author: FUKAYA, Hidenori (Osaka Univ.)

Presenter: FUKAYA, Hidenori (Osaka Univ.)

Session Classification: Session

Contribution ID: 6 Type: **not specified**

Quantum information approach to physical phenomenon

Thursday, May 22, 2025 4:00 PM (45 minutes)

Primary author: NOZAKI, Masahiro

Presenter: NOZAKI, Masahiro

Session Classification: Session

Contribution ID: 7 Type: **not specified**

Local observables in quantum gravity with an observer's clock

Thursday, May 22, 2025 4:45 PM (45 minutes)

Primary author: SHIMADA, Kengo (Yukawa Institute for Theoretical Physics, Kyoto University)

Presenter: SHIMADA, Kengo (Yukawa Institute for Theoretical Physics, Kyoto University)

Session Classification: Session

Contribution ID: 8 Type: not specified

Recent progress and future prospects for solving the sign problem

Friday, May 23, 2025 10:00 AM (45 minutes)

符号問題解決に向けた最近の進展と今後の展望

Primary author: FUKUMA, Masafumi (Kyoto University)

Presenter: FUKUMA, Masafumi (Kyoto University)

Session Classification: Session

Contribution ID: 9 Type: not specified

Weyl fermions in Lattice Gauge Theory — Integrability of chiral determinant and all that

Friday, May 23, 2025 10:45 AM (45 minutes)

格子ゲージ理論におけるワイルフェルミオン-カイラル行列式の積分可能性、その他

Primary author: KIKUKAWA, Yoshio (University of Tokyo)

Presenter: KIKUKAWA, Yoshio (University of Tokyo)

Session Classification: Session

Contribution ID: 10 Type: not specified

Hybrid Monte Carlo simulation of SU(N)/Z_N Yang-Mills theory

Friday, May 23, 2025 12:00 PM (45 minutes)

Primary author: SUZUKI, Hiroshi

Presenter: SUZUKI, Hiroshi

Session Classification: Session

Contribution ID: 11 Type: not specified

Semiclassical approaches to confinement: monopole and center vortex

Friday, May 23, 2025 2:00 PM (45 minutes)

Primary author: HAYASHI, Yui (YITP, Kyoto University)

Presenter: HAYASHI, Yui (YITP, Kyoto University)

Session Classification: Session

Contribution ID: 12 Type: not specified

Generalized symmetry, Anomaly, and Lattice

Friday, May 23, 2025 2:45 PM (45 minutes)

Primary author: TANIZAKI, Yuya (YITP, Kyoto)

Presenter: TANIZAKI, Yuya (YITP, Kyoto)

Session Classification: Session

Contribution ID: 13 Type: not specified

Recent progress of tensor renormalization group approach

Friday, May 23, 2025 4:00 PM (45 minutes)

Primary author: TAKEDA, Shinji (Kanazawa university)

Presenter: TAKEDA, Shinji (Kanazawa university)

Session Classification: Session

Contribution ID: 14 Type: not specified

Closing remark

Friday, May 23, 2025 4:45 PM (15 minutes)

Primary author: Prof. AOKI, Sinya (Yukawa Institute for Theoretical Physics, Kyoto Univer-

sity)

Presenter: Prof. AOKI, Sinya (Yukawa Institute for Theoretical Physics, Kyoto University)

Session Classification: Session