

Session Program

25-27 Nov 2026

KEK Theory Workshop 2026

Parallel Session

KEK Tsukuba Campus, K03 Seminar Hall
KEK, 1-1 OHO, TSUKUBA, IBARAKI 305-0801, JAPAN

Wednesday 25 November

14:50

Parallel Session: IA

Session | Location: KEK Tsukuba Campus, K03 Seminar Hall, KEK, 1-1 OHO, TSUKUBA, IBARAKI 305-0801, JAPAN | Convener: Hajime Aoki

14:50-15:10 Quantum spacetime and gravity from the IKKT matrix model

Speaker
Harold Steinacker

15:10-15:30 Lie-algebraic saddles in the Lorentzian IKKT matrix model

Speaker
Henry Liao

15:30-15:50 Matrix-vector models for the 3D Ising CFT

Speaker
Asato Tsuchiya

15:50-16:10 The large-N limit of correlation functions from homotopy algebras

Speaker
Karin Yukuhiro

16:10-16:30
Relation between OSp invariant and light-cone gauge string field theories at a free level

Speaker
Tatsuya Endo

16:30

14:50

Parallel Session: IB

Session | Location: KEK Tsukuba Campus, K03 Meeting Room I | Convener: Sinya Aoki

14:50-15:10
Toward a Semi-Abelian Cardy-Rabinovici Model: Twist Vortices and Gapped Phases of Yang-Mills Theory

Speaker
Nagare Katayama

15:10-15:30 Symmetric Mass Generation of Eight Majorana Domain-Wall Fermions

Speaker
Sho Araki

15:30-15:50 Lattice chiral gauge symmetry via non-Abelian bosonization

Speaker
Soma Onoda

15:50-16:10
Non-Invertible Symmetry and Emergent Maxwell Theory in $\mathbb{Z}_4$ Lattice Gauge Theory

Speaker

Satoshi Yamaguchi

16:10–16:30

Complex Langevin Lattice QCD for Color superconductivity**Speaker**

Kohtaroh Miura

16:30

16:50

Parallel Session: IIA**Session** | **Location:** KEK Tsukuba Campus, K03 Seminar Hall, KEK, 1-1 OHO, TSUKUBA, IBARAKI 305-0801, JAPAN |**Convener:** Satoshi Yamaguchi

16:50–17:10

Classical Aspects of Higher-Form Symmetries**Speaker**

Siye Wu

17:10–17:30

Lazarides-Shafi axion models as Dijkgraaf-Witten theories**Speaker**

Ryo Yokokura

17:30–17:50

Anomalies and discrete torsion in Type II and Type I worldsheet theories**Speaker**

Shotaro Kawanago

17:50–18:10

The tertiary invariant of two-dimensional minimally supersymmetric field theories**Speaker**

Hiroki WADA

18:10

16:50

Parallel Session: IIB**Session** | **Location:** KEK Tsukuba Campus, K03 Meeting Room I | **Convener:** Nobuyoshi Ohta

16:50–17:10

Interior of Schwarzschild in semiclassical gravity**Speaker**

Yoshinori Matsuo

17:10–17:30

Massive Kaluza-Klein Effects in Two-Dimensional Effective Theories of Charged Black Holes**Speaker**

Yu Miyauchi

17:30–17:50

Hawking Radiation in Scale-Dependent Spacetimes**Speaker**

Wei-Hsiang Shao

17:50–18:10

Analogous Hawking phenomenon in chaos**Speaker**

Takeshi Morita

18:10

Thursday 26 November

14:50

Parallel Session: IIIA

Session | **Location:** KEK Tsukuba Campus, K03 Seminar Hall, KEK, 1-1 OHO, TSUKUBA, IBARAKI 305-0801, JAPAN | **Convener:** Ryo Yokokura

14:50–15:10

Exact partition function of arithmetic Ising model

Speaker

Ken Kikuchi

15:10–15:30

Polarized Surface Defect in the $O(N)$ Model

Speaker

Haruki Nakayama

15:30–15:50

Bootstrapping Wilson lines in Critical Bosonic QED in three dimensions

Speaker

Jun Maeda

15:50–16:10

Non-perturbative news from the conformal window

Speaker

Alvaro Pastor Gutierrez

16:10–16:30

Construction and Stability of Non-Abelian Vortices in an $SO(3)$ Gauge Theory

Speaker

Kazuya Murakami

16:30

14:50

Parallel Session: IIIB

Session | **Location:** KEK Tsukuba Campus, K03 Meeting Room I | **Convener:** Yoshifumi Hyakutake

14:50–15:10

Quadratic gravity RG trajectories consistent with Hubble, laboratory and inflationary scales: asymptotically safe and $R^2 + C^2$ dominant scenarios

Speaker

Hiroki Hoshina

15:10–15:30

Noncritical conformal gravity and four-dimensional Liouville theory

Speaker

Nobuyoshi Ohta

15:30–15:50

Vacuum structure of a scalar field on a torus with uniform magnetic flux

Speaker

Maki Takeuchi

15:50–16:10

Combinatorial Structures of Internal Spaces and Their Mutation and Crossover toward Exploring the String Landscape

16:30

Speaker
Matsuo Sato

16:10–16:30 **Quantum Algorithm for Finding Vacua in the ADK Landscape**

Speaker
Shirabe Endo

16:50

Parallel Session: IVA

Session | **Location:** KEK Tsukuba Campus, K03 Seminar Hall, KEK, 1-1 OHO, TSUKUBA, IBARAKI 305-0801, JAPAN | **Convener:** Matsuo Sato

16:50–17:10 **AdS/CFT as a regularization and trace anomaly**

Speaker
Sinya Aoki

17:10–17:30

Constructing the Gravity Sector with Singletons in $\text{AdS}_3/\text{CFT}_2$ for General $\mathcal{N}$

Speaker
Leon Miyahara

17:30–17:50

Chiral magnetic wave and axial charge relaxation in a holographic flavor brane model

Speaker
Kensei Tanaka

17:50–18:10 **Quantum Corrections to D6-branes and KK-monopoles**

Speaker
Yoshifumi Hyakutake

18:10

16:50

Parallel Session: IVB

Session | **Location:** KEK Tsukuba Campus, K03 Meeting Room I | **Convener:** Kohtaroh Miura

16:50–17:10 **Quantum Reference Frames from dS/CFT**

Speaker
Hayate Kimura

17:10–17:30

Understanding Color Confinement through Quantum Reference Frames and Relational Observables

Speaker
Kei-Ichi Kondo

17:30–17:50 **Genuine Tripartite Entanglement Selects Gauge-Invariant Theories**

Speaker
Junya Yamagishi

17:50–18:10

Exploring the measurement problem by numerical calculations of quantum real-time evolution

Speaker
Jun Nishimura

18:10