

Session Program

26 July 2026 to 1 August 2026



The 43rd International Symposium on Lattice Field Theory (Lattice 2026)

***Theoretical developments and applications
beyond the SM***

University of Maryland, College Park
Adele H. Stamp Student Union 3972 Campus Dr College Park, MD 20742, United States

Monday 27 July

14:00

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Evan Berkowitz

14:00–14:20

The Neutron Electric Dipole Moment from Lattice QCD using a Background Electric Field

Speaker

Fangcheng He

14:20–14:40

Axial form factor and neutron EDM from lattice QCD

Speaker

Rajan Gupta

14:40–15:00

Lattice determination of the topological rate at finite momentum in SU(3) Yang-Mills

Speaker

Roberto Dionisio

15:00–15:20

Topological susceptibility in the 2d $O(3)$ nonlinear sigma model using the tree-level improved gradient flow

Speaker

Mika Lauk

15:20–15:40

χ SB for lattice QED in a strong external magnetic field -- B dependence of the chiral condensate

Speaker

Donald Sinclair

15:40

16:10

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Yannick Meurice

16:10–16:30

A Vector-Vector-Axial Anomaly in 4D

Speaker

Evan Berkowitz

16:30–16:50

From Lattice to Boundary: Symmetries and Anomalies of 3+1D Staggered Fermions

Speaker

Tatsuya Yamaoka

16:50–17:10

Chiral gauge theories on a disk and a slab

Speaker
Jinlong Dang

17:10–17:30

Lattice chiral gauge symmetry via bosonization

Speaker
Soma Onoda

17:30

Tuesday 28 July

14:00

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Nobuyuki Matsumoto

14:00–14:20

Progress on scalar singlets and glueballs in lattice gauge theories coupled to matter fields in multiple representations

Speaker

Nuno Brito

14:20–14:40

Progress on the $\text{Sp}(4)$ lattice gauge theory at finite temperature in the presence of fermions

Speaker

Alexis Harilaos Verney-Provatas

14:40–15:00

Progress on $\text{Sp}(4)$ Gauge Theory with $N_{\text{f}}=2$ Fundamental Möbius Domain Wall Fermions

Speaker

Gianmarco Simonetti

15:00–15:20

Zeros of the partition function for 12 flavor QCD and the spectral gap

Speaker

Yannick Meurice

15:20–15:40

First Overlap Formulation and Perturbative Results for Supersymmetric QCD

Speaker

Dr Marios Costa

15:40

16:10

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Matteo Bresciani

16:10–16:30

Domain-wall-seeded bubble nucleation on the lattice

Speaker

Jaakko Hällfors

16:30–16:50

The Physics of Phase Transitions is Universal, Numerical Simulations aren't

Speaker

Johann Ostmeyer

16:50–17:10

Order-Order Interface Tension in $\text{SU}(N)$ Gauge Theory

Speaker

Aaron Haarti

17:10-17:30

Magnetic Phase Transitions in Zigzag Graphene Nanoribbons at Finite Chemical Potential: Mean-Field Theory and Hybrid Monte Carlo

Speaker

Felix Strohkirch

17:30

Thursday 30 July

14:00

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Hersh Singh

14:00–14:20

Tensor renormalization group approach to entanglement negativity

Speaker

Gota Tanaka

14:20–14:40

Probing Criticality in the $(1+1)$ D Real Scalar ϕ^4 Theory with Entanglement Entropy and HOTRG

Speaker

Takahiro Hayazaki

14:40–15:00

Tensor Renormalization Group Study of Step-Scaling Function in the $CP(1)$ Model with a θ Term

Speaker

Hayato Aizawa

15:00–15:20

Tensor renormalization group study of cold and dense two- and three-color QCD in the strong coupling limit

Speaker

Yuto Sugimoto

15:20–15:40

Phase diagram of the single-flavor Gross-Neveu-Wilson model from the Grassmann corner transfer matrix renormalization group

Speaker

Shinichiro Akiyama

15:40

16:10

Theoretical developments and applications beyond the SM

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16:10–16:30

Searching for symmetric mass generation with staggered fermions in four dimensions

Speaker

Gwen Hartshaw

16:30–16:50

Symmetric mass generation in a three-dimensional fermion lattice model

Speaker

Marina Krstic Marinkovic

16:50-17:10

Anomalous Thermalization in the Presence of Generalized Symmetries on the Lattice

Speaker

Thea Budde

17:10-17:30

Hybrid Monte Carlo for the extended Kane-Mele-Hubbard model

Speaker

Finn Temmen

17:30

Friday 31 July

14:00

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Robert Mawhinney

14:00–14:20

Qubit-Regularized Gauge Theories on Plaquette Chains

Speaker

Rui Xian Siew

14:20–14:40

Studying QED3 in radial quantization: coarse lattice study

Speaker

Nobuyuki Matsumoto

14:40–15:00

Euclidean correlation functions in quantum gravity

Speaker

John Laiho

15:00–15:20

One-loop perturbation theory estimates for exponential clover-improved Wilson fermions

Speaker

Juan Falceto

15:20–15:40

Non-perturbative renormalization of the energy-momentum tensor in $N_f=3$ Wilson lattice QCD

Speaker

Matteo Bresciani

15:40

16:10

Theoretical developments and applications beyond the SM

Session | **Location:** Adele H. Stamp Student Union, Margaret Brent B, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Antonio Smecca

16:10–16:30

Gravitational waves from the confinement transition in the one-flavor SU(4) Hyper Stealth Dark Matter

Speaker

Nobuyuki Matsumoto

16:30–16:50

Quenched glueball and meson spectrum in the 't Hooft limit of lattice Yang-Mills theories

Speaker

Andrea Falzetti

17:30