

Session Program

Jul 26 - 30, 2021



**The 38th International Symposium on
Lattice Field Theory**

***QCD in searches for physics beyond the
Standard Model***

Mon, July 26

1:00 PM

QCD in searches for physics beyond the Standard Model

Session | Convener: Thomas Blum

1:00 - 1:15 PM

Finite size effects in the leading hadronic vacuum polarisation contribution to $(g-2)_\mu$

Speaker

Dr Finn M. Stokes

1:15 - 1:30 PM

Continuum extrapolation of the hadronic vacuum polarization

Speaker

Kalman Szabo

1:30 - 1:45 PM

Hadronic vacuum polarization of the muon on 2+1+1-flavor HISQ ensembles: an update.

Speaker

Shaun Lahert

1:45 - 2:00 PM

The muon $g-2$ with four flavors of staggered quarks

Speaker

Prof. Christopher Aubin

2:00 - 2:15 PM

High precision scale setting on the lattice

Speaker

Lukas Varnhorst

2:15 - 2:30 PM

Ruling Out the Massless Up-Quark Solution to the Strong CP Problem by Computing the Topological Mass Contribution with Lattice QCD

Speaker

Lena Funcke

2:30 - 2:45 PM

Proton decay amplitudes at the physical point with chirally symmetric quarks

Speaker

Sergey Syritsyn

2:45 - 3:00 PM

Near Physical Point Lattice Calculation of Isospin-Breaking Corrections to $K_{\ell\ell 2}/\pi_{\ell\ell 2}$

Speaker

Andrew Zhen Ning Yong

3:00 PM

9:00 PM

QCD in searches for physics beyond the Standard Model

Session | Convener: Maarten Golterman

9:00 – 9:15 PM

Lattice QCD calculation of the electroweak box diagrams for the kaon semileptonic decays

Speaker

Pengxiang Ma

9:15 – 9:30 PM

$B \rightarrow D^{(*)} \ell \bar{\nu}$ semileptonic decays in lattice QCD with domain-wall heavy quarks

Speaker

Takashi Kaneko

9:30 – 9:45 PM

Calculation of kaon semileptonic form factor with the PACS10 configurations

Speaker

Takeshi Yamazaki

9:45 – 10:00 PM

Controlling unwanted exponentials in lattice calculations of radiative leptonic decays

Speaker

Christopher Kane

10:00 – 10:15 PM

$K \rightarrow \pi \pi$ decay matrix elements at the physical point with periodic boundary conditions

Speaker

Masaaki Tomii

10:15 – 10:30 PM

Towards determining the short-distance contribution to neutrinoless double-beta decay from lattice QCD.

Speaker

Saurabh Kadam

10:30 – 10:45 PM

Calculation of neutron electric dipole moment due to the QCD topological term, Weinberg three-gluon operator and the quark chromoelectric moment

Speaker

Dr Tanmoy Bhattacharya

10:45 – 11:00 PM

Neutron Electric Dipole Moment with Enhanced Low Mode Statistics

Speaker

Michael Abramczyk

11:00 PM

Tue, July 27

5:00 AM

QCD in searches for physics beyond the Standard Model

Session | Conveners: Finn Stokes, Vera Guelpers

5:00 – 5:15 AM

Hadronic vacuum polarization contribution to the muon $g-2$ from the Mainz collaboration

Speaker

Hartmut Wittig

5:15 – 5:30 AM

Consistency of lattice and R-ratio determinations of the HVP: Update from RBC/UKQCD

Speaker

Christoph Lehner

5:30 – 5:45 AM

Window contributions to the muon hadronic vacuum polarization with twisted-mass fermions

Speaker

Davide Giusti

5:45 – 6:00 AM

Multi-level computation of the hadronic vacuum polarization contribution to $(g_{\mu-2})$

Speaker

Leonardo Giusti

6:00 – 6:15 AM

Leading isospin breaking effects in the HVP contribution to a_{μ} and to the running of α

Speaker

Andreas Risch

6:15 – 6:30 AM

QED and strong isospin corrections in the hadronic vacuum polarization contribution to the anomalous magnetic moment of the muon

Speaker

Letizia Parato

6:30 – 6:45 AM

Pseudoscalar transition form factors and the hadronic light-by-light contribution to the muon $g-2$

Speaker

Willem Verplanke

6:45 – 7:00 AM

Pion Pole Contribution to HLbL from Twisted Mass Lattice QCD at the physical point

Speaker

Sebastian Andreas Burri

7:00 - 7:15 AM

Hadronic light-by-light contribution to $(g-2)_\mu$ from lattice QCD: a complete calculation**Speaker**

En-Hung Chao

7:15 - 7:30 AM

Cutoff effects in short-distance quantities in lattice QCD**Speaker**

Tim Harris

7:30 - 7:45 AM

Hadronic contributions to the running of electromagnetic and weak couplings**Speaker**

Miguel Teseo San José Pérez

7:45 - 8:00 AM

HVP contribution to Running Coupling and Electroweak Precision Science**Speaker**

Kohtaroh Miura

8:00 AM

Wed, July 28

5:00 AM

QCD in searches for physics beyond the Standard Model

Session | Conveners: Davide Giusti, Takashi Kaneko

5:15 – 5:30 AM

Comparison of lattice QCD+QED predictions for radiative leptonic decays of light mesons with experimental data

Speakers

Silvano Simula, Silvano Simula

5:30 – 5:45 AM

Calculating the $K \rightarrow \pi \ell^+ \ell^-$ Rare Kaon Decay Amplitude at the Physical Point

Speaker

Fionn O hGain

5:45 – 6:00 AM

Towards a lattice determination of the form factors of the rare hyperon decay $\Sigma^+ \rightarrow p \ell^+ \ell^-$

Speaker

Mr Raoul Hodgson

6:00 – 6:15 AM

All HISQ $B \rightarrow K$ form factors

Speaker

Dr Chris Bouchard

6:15 – 6:30 AM

BSM $B - \bar{B}$ mixing

Speaker

Felix Erben

6:30 – 6:45 AM

Neutron Electric Dipole Moment from Overlap Fermions

Speaker

Jian Liang

6:45 – 7:00 AM

Tensor Charges and their Impact on Physics Beyond the Standard Model

Speaker

Rose Smail

7:00 – 7:15 AM

The neutron electric dipole moment revisited

Speaker

Gerrit Schierholz

7:15 – 7:30 AM

Neutron electric dipole moment using lattice QCD simulations at the physical point

Speaker

Antonino Todaro

7:30 - 7:45 AM

Renormalization with the Gradient Flow: A Novel Method for Calculating Loop Integrals

Speaker

Matthew Rizik

7:45 - 8:00 AM

Power divergences of the quark-chromo electric dipole moment operator with the gradient flow

Speaker

Dr Jangho Kim

8:00 AM