

Session Program

Aug 8 - 13, 2022



The 39th International Symposium on Lattice Field Theory (Lattice 2022)

QCD in searches for physics beyond the Standard Model

Hörsaalzentrum Poppelsdorf, Alle Räume
Endericher Allee 19 C, 52115 Bonn, Germany

Tue, August 9

2:00 PM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model I

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Hartmut Wittig

2:00 – 2:20 PM **nEDM from the theta-term and chromoEDM operators**

Speaker

Dr Tanmoy Bhattacharya

2:20 – 2:40 PM

Neutron Electric Dipole Moment from the Theta Term with Overlap Fermions

Speaker

Keh-Fei Liu

2:40 – 3:00 PM

Constraining Beyond The Standard Model Nucleon Isovector Charges

Speaker

Ms Rose Smail

3:00 – 3:20 PM

Chiral extrapolation of hadronic vacuum polarization and isospin-breaking corrections

Speaker

Martin Hoferichter

3:20 – 3:40 PM

Isospin breaking corrections to the vector-vector correlator in QCD: the muon $g-2$ and tau decays.

Speaker

Mattia Bruno

3:40 – 4:00 PM

The $(g-2)$ intermediate window quantity from a coordinate-space method

Speaker

Julian Parrino

4:00 PM

4:30 PM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model II

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Steven Gottlieb

4:30 – 4:50 PM

Disconnected contribution to the LO HVP term of muon $g-2$ from ETMC

Speaker

Simone Bacchio

4:50 – 5:10 PM

Time windows of the muon HVP from twisted mass lattice QCD

Speaker

Giuseppe Gagliardi

5:10 - 5:30 PM

Intermediate window observable for the hadronic vacuum polarization contribution to the muon $g-2$ from $O(a)$ improved Wilson quarks

Speaker

Simon Kuberski

5:30 - 5:50 PM

The hadronic running of the electromagnetic coupling and electroweak mixing angle (Part I)

Speaker

Miguel Teseo San José Pérez

5:50 - 6:10 PM

The hadronic running of the electromagnetic coupling and electroweak mixing angle (Part II)

Speakers

Hartmut Wittig, Miguel Teseo San José Pérez

6:30 PM

Thu, August 11

9:00 AM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model III

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Marcus Petschlies

9:00 - 9:20 AM

A first look at the HVP from QCD and QCD+QED with C^* boundary conditions

Speaker

Roman Gruber

9:20 - 9:40 AM

A first look at the HVP from QCD and QCD+QED with C^* boundary conditions II

Speaker

Anian Altherr

9:40 - 10:00 AM

Finite-Size Effects of the Hadronic Vacuum Polarization Contribution to the Muon $(g-2)$ with C^{\star} Boundary Conditions

Speaker

Sofie Martins

10:00 - 10:20 AM

Probing the R-ratio on the lattice

Speaker

Alessandro De Santis

10:20 - 10:40 AM

Renormalization of the quark chromomagnetic dipole operators in the gradient flow scheme at next-to-next-to-leading order QCD

Speaker

Robert Harlander

10:40 - 11:00 AM

Pion pole contributions to HLbL at the physical point

Speaker

Gurtej Kanwar

11:00 AM

11:30 AM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model IV

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Robert Harlander

11:30 - 11:50 AM

Eta pole contributions to HLbL at the physical point

Speaker

Sebastian Andreas Burri

11:50 AM - 12:10 PM

Rare $K^+ \rightarrow \pi^+ \ell \ell^-$ decays with physical mass light-quarks

Speaker

Ryan Hill

12:10 - 12:30 PM

Progress on the exploratory calculation of the rare Hyperon decay $\Sigma^+ \rightarrow p \ell^+ \ell^-$

Speaker

Raoul Hodgson

12:30 - 12:50 PM

Finite-volume effects in a calculation of the rare Hyperon decay $\Sigma^+ \rightarrow p \ell^+ \ell^-$

Speaker

Felix Erben

12:50 PM

Fri, August 12

2:10 PM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model V

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Carleton DeTar

2:10 - 2:30 PM

Hadronic contribution to the running of the electromagnetic coupling constant

Speaker

Sophie Mutzel

2:30 - 2:50 PM

Hadronic vacuum polarization from step scaling

Speaker

Fabian Justus Frech

2:50 - 3:10 PM

Neutrinoless Double Beta Decay from Lattice QCD: The Short-Distance $\pi^+ \rightarrow \pi^+ e^- e^-$ Amplitude

Speaker

Patrick Oare

3:10 - 3:30 PM

Preliminary Lattice QCD Study of $nn \rightarrow ppee$ Matrix Elements for Neutrinoless Double-Beta Decay

Speaker

Anthony Grebe

3:30 - 3:50 PM

Intermediate window observable for the muon $g-2$ from overlap valence quarks on staggered ensembles

Speaker

Andrey Kotov

3:50 - 4:10 PM

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

Speaker

Willem Verplanke

4:10 PM

4:40 PM

QCD in searches for physics beyond the Standard Model: QCD in searches for physics beyond the Standard Model VI

Session | Location: CP1-HSZ, CP1-HSZ/0.001 (CP1-HSZ) - HS3 | Convener: Martin Hoferichter

4:40 - 5:00 PM

Hadronic Vacuum Polarization: A Window on the muon $g-2$ mystery

Speaker

Steven Gottlieb

5:00 - 5:20 PM

Updates on the HVP computation from the BWM collaboration

Speaker
Bálint Tóth

5:20 - 5:40 PM

Calculating the QED correction to the hadronic vacuum polarisation on the lattice

Speaker
Mr Gaurav Sinha Ray

5:40 - 6:00 PM

Muon g-2 with overlap valence fermions

Speaker
Gen Wang

6:00 - 6:20 PM

The muon anomalous magnetic moment with staggered fermions: is the lattice spacing small enough?

Speaker
Maarten Golterman

6:20 - 6:40 PM

RBC/UKQCD update of the HVP contribution to the muon g-2

Speaker
Christoph Lehner

6:40 PM