### Advances in Lattice Gauge Theory 2019

### **Report of Contributions**

Opening

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

### **Opening**

Monday 22 July 2019 09:30 (30 minutes)

Contribution ID: 9 Type: **not specified** 

### Implementing the three-particle quantization condition: a progress report

Monday 22 July 2019 11:30 (1 hour)

**Presenter:** SHARPE, Steve

Session Classification: scattering/spectroscopy

Track Classification: Scattering & spectroscopy

Contribution ID: 10 Type: not specified

#### Overview of coupled-channel scattering

Wednesday 24 July 2019 11:30 (1 hour)

**Presenter:** DUDEK, Jozef

**Session Classification:** scattering/spectroscopy

**Track Classification:** Scattering & spectroscopy

Contribution ID: 11 Type: not specified

#### Partial wave mixing and rho pi scattering

Thursday 25 July 2019 10:00 (1 hour)

**Presenter:** THOMAS, Christopher (University of Cambridge)

Session Classification: scattering/spectroscopy

Contribution ID: 12 Type: not specified

#### Stabilised Wilson fermions for QCD

Thursday 8 August 2019 11:30 (1 hour)

**Presenter:** RAGO, Antonio (University of Plymouth (GB))

Session Classification: scattering/spectroscopy

Contribution ID: 13 Type: not specified

### Meson interactions at Large Nc

Friday 2 August 2019 11:30 (1 hour)

Presenter: ROMERO-LÓPEZ, Fernando

Session Classification: scattering/spectroscopy

Contribution ID: 15 Type: not specified

#### The b1 resonance from omega pi scattering

Thursday 25 July 2019 11:30 (1 hour)

Presenter: WOSS, Antoni

Session Classification: scattering/spectroscopy

Contribution ID: 16 Type: not specified

#### TH Colloquium: Gradient Flow perturbation theory

Wednesday 24 July 2019 14:00 (1 hour)

TH Colloquium: Gradient Flow p  $\,\cdots$ 

**Presenter:** HARLANDER, Robert

Contribution ID: 17 Type: not specified

#### Quasi PDF as observables

Wednesday 24 July 2019 10:00 (1 hour)

Presenter: DEL DEBBIO, Luigi (The University of Edinburgh (GB))

Session Classification: scattering/spectroscopy

Contribution ID: 18 Type: not specified

### Neural network applications to spectral reconstruction

Friday 26 July 2019 11:30 (1 hour)

**Presenter:** Dr PORTELLI, Antonin (The University of Edinburgh)

Session Classification: scattering/spectroscopy

Contribution ID: 19 Type: not specified

### **Boosting hotQCD**

Tuesday 6 August 2019 09:30 (1 hour)

Presenter: DALLABRIDA, Mattia (Universita & INFN, Milano-Bicocca (IT))

Session Classification: QED+QCD

Contribution ID: 20 Type: not specified

# Application of the gradient flow to the energy-momentum tensor

Tuesday 6 August 2019 11:00 (1 hour)

Presenter: SUZUKI, Hiroshi

**Session Classification:** QED+QCD

Contribution ID: 21 Type: not specified

# Scattering from finite volume spectral functions: status and perspectives

Friday 26 July 2019 10:00 (1 hour)

**Presenters:** BULAVA, John (University of Southern Denmark); BULAVA, John

Session Classification: scattering/spectroscopy

Contribution ID: 22 Type: not specified

#### The structure of hadronic excitations

Tuesday 30 July 2019 10:00 (1 hour)

**Presenter:** LEINWEBER, Derek (CSSM, University of Adelaide)

Session Classification: form factors & decays

Contribution ID: 23 Type: not specified

### Structure and transitions of nucleon excitations via parity-expanded variational analysis

Tuesday 30 July 2019 11:30 (30 minutes)

**Presenter:** STOKES, Finn (Forschungszentrum Jülich GmbH)

Session Classification: form factors & decays

Contribution ID: 24

Type: not specified

# $B_c \rightarrow B_{s,d}$ form factors with NRQCD and HISQ bottom quarks

Tuesday 30 July 2019 12:00 (30 minutes)

**Presenter:** COOPER, Laurence (University of Cambridge)

Session Classification: form factors & decays

Contribution ID: 25 Type: not specified

# Inclusive B decay structure functions and and their decomposition into final states

Wednesday 31 July 2019 11:30 (1 hour)

Presenter: HASHIMOTO, Shoji (KEK)

Session Classification: form factors & decays

Contribution ID: 26 Type: not specified

## Heavy-to-light decay form factors on N\_f=2+1+1 HISQ ensembles

Wednesday 31 July 2019 10:00 (1 hour)

Presenter: GAMIZ, Elvira (University of Granada)

**Session Classification:** form factors & decays

Contribution ID: 27 Type: not specified

### Semileptonic D to K decay from full lattice QCD with HISQ

Wednesday 31 July 2019 09:30 (30 minutes)

**Presenter:** CHAKRABORTY, Bipasha (University of Cambridge)

Session Classification: form factors & decays

Contribution ID: 28 Type: not specified

### Hadronic light-by-light scattering

Thursday 1 August 2019 11:30 (1 hour)

Presenter: GERARDIN, Antoine

Session Classification: form factors & decays

Contribution ID: 29 Type: not specified

# Status of the HVP contribution to (g-2) from Lattice QCD+QED

Thursday 1 August 2019 09:30 (1 hour)

**Presenter:** LEHNER, Christoph (BNL)

Session Classification: form factors & decays

Contribution ID: 30 Type: not specified

### Pion Scattering to (g-2)\_mu at Physical Pion Mass

Friday 2 August 2019 10:00 (1 hour)

**Presenter:** MEYER, Aaron (Brookhaven National Laboratory)

**Session Classification:** scattering/spectroscopy

Contribution ID: 31 Type: not specified

### K pi scattering and the Kstar

Thursday 8 August 2019 10:00 (1 hour)

**Presenter:** WILSON, David (Trinity College Dublin)

**Session Classification:** scattering/spectroscopy

Contribution ID: 32 Type: not specified

## TH Colloquium: From Scattering Amplitudes to Gravitational Waves

Wednesday 31 July 2019 14:00 (1 hour)

TH Colloquium: From Scattering  $\cdots$ 

Presenter: BERN, Zvi

Contribution ID: 33 Type: not specified

### Parton distribution functions from lattice QCD

Wednesday 7 August 2019 11:30 (1 hour)

Presenter: ALEXANDROU, Constantia

Session Classification: QED+QCD

Contribution ID: 34 Type: not specified

### Finite volume effects in the HVP contribution to muon (g-2)

Thursday 1 August 2019 10:30 (30 minutes)

Presenters: PATELLA, Agostino (Humboldt-Universität zu Berlin); PATELLA, Agostino (CERN)

**Session Classification:** form factors & decays

Contribution ID: 35 Type: not specified

# Computing isospin breaking corrections in massive QED on the lattice

Monday 5 August 2019 11:30 (1 hour)

Presenters: DELLA MORTE, Michele; DELLA MORTE, Michele (Unknown)

**Session Classification:** QED+QCD

Contribution ID: 36 Type: not specified

### Heavy quarks as a tool in non-perturbative renormalization

Wednesday 7 August 2019 10:00 (1 hour)

**Primary author:** RAMOS, Alberto

Presenters: RAMOS, Alberto; RAMOS MARTINEZ, Alberto (Trinity College Dublin (IE))

Session Classification: QED+QCD

Contribution ID: 37 Type: not specified

#### QED corrections to leptonic meson decays

Monday 5 August 2019 10:00 (1 hour)

**Presenter:** GUELPERS, Vera (University of Edinburgh)

Session Classification: QED+QCD

Contribution ID: 38 Type: not specified

# TH Colloquium: Frontiers in lattice field theory: Calculations of QCD+QED

Wednesday 7 August 2019 14:00 (1 hour)

TH Colloquium: Frontiers in latti $\, \cdots \,$ 

Presenter: TANTALO, Nazario

Contribution ID: 39 Type: not specified

#### Hadronic structure from the CLS Nf=2+1 ensembles

Monday 29 July 2019 10:00 (1 hour)

**Presenter:** COLLINS, Sara (University of Regensburg)

Session Classification: form factors & decays

Contribution ID: 40 Type: not specified

#### **Overview over Form Factor calculations**

Monday 29 July 2019 11:30 (1 hour)

**Presenter:** JUETTNER, Andreas

Session Classification: form factors & decays

Contribution ID: 41 Type: not specified

## Towards a Holographic Description of Cosmology on the Lattice

Tuesday 30 July 2019 15:30 (30 minutes)

**Presenter:** JUETTNER, Andreas

Contribution ID: 42 Type: not specified

## Towards neutrinoless double-beta decay from lattice QCD

Tuesday 23 July 2019 10:00 (1 hour)

Presenter: DAVOUDI, Zohreh (University of Maryland)

**Session Classification:** scattering/spectroscopy

Contribution ID: 43 Type: not specified

#### Electromagnetic form factors and the proton radius

Tuesday 23 July 2019 11:30 (1 hour)

**Presenter:** GREEN, Jeremy (DESY, Zeuthen)

**Session Classification:** scattering/spectroscopy

Contribution ID: 44 Type: **not specified** 

# Three particles in the infinite volume: the 'ladders and resonances' approach for the $a_1(1260)$ dynamics

Monday 22 July 2019 10:30 (30 minutes)

Presenter: MIKHASENKO, Mikhail (CERN)

Session Classification: scattering/spectroscopy

Contribution ID: 45 Type: not specified

#### QCD in external magnetic fields

Friday 9 August 2019 11:30 (30 minutes)

**Presenter:** KOTOV, Andrey

Session Classification: QED+QCD

Contribution ID: 46 Type: not specified

#### Isospin breaking in tau decays for (g-2)\_mu

Friday 9 August 2019 10:00 (1 hour)

Presenter: BRUNO, Mattia (CERN)

Session Classification: QED+QCD

Contribution ID: 47 Type: **not specified** 

### Closing

Friday 9 August 2019 12:00 (30 minutes)

Contribution ID: 49 Type: not specified

#### Introduction to scattering on the lattice

Monday 22 July 2019 10:00 (30 minutes)

Presenter: HANSEN, Maxwell (CERN)

Session Classification: scattering/spectroscopy

Discussions

Contribution ID: 50 Type: not specified

#### **Discussions**

Friday 26 July 2019 14:30 (1h 30m)

Session Classification: Discussion

Advances in Lat  $\,\cdots\,$  / Report of Contributions

Discussion

Contribution ID: 51 Type: not specified

#### Discussion

Tuesday 30 July 2019 16:00 (1 hour)

Session Classification: Discussion