

# **Advances in Lattice Gauge Theory 2019**

## **Report of Contributions**

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 $N_c$

*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)*

**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)*

**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)*

**Presenter:** TANTALO, Nazario

Contribution ID: 39

Type: **not specified**

## Hadronic structure from the CLS $N_f=2+1$ 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)<sub>mu</sub>

*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

Contribution ID: **50**

Type: **not specified**

## Discussions

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

**Session Classification:** Discussion

Contribution ID: 51

Type: **not specified**

## Discussion

*Tuesday 30 July 2019 16:00 (1 hour)*

**Session Classification:** Discussion