

Session Program

24-30 Jul 2016



The 34th International Symposium on Lattice Field Theory (Lattice 2016)

Hadron Structure

Highfield Campus, University of Southampton
Highfield Campus, Southampton SO17 1BJ, UK

Monday 25 July

14:15

Hadron Structure

Session |

Location: Highfield Campus, University of Southampton, Building B2a Room 2077, Highfield Campus, Southampton SO17 1BJ, UK |

Convener: Dr Jeremy Green

14:15-14:35

The Calculation of Parton Distributions from Lattice QCD

Speaker

Dr Christian Wiese

14:35-14:55

Proton spin decomposition and its perturbative renormalization

Speaker

Dr YIBO Yang

14:55-15:15

Quark orbital dynamics in the nucleon - from Ji to Jaffe-Manohar orbital angular momentum

Speaker

Michael Engelhardt

15:15-15:35

Nucleon spin and quark content at the physical point

Speaker

Prof. Constantia Alexandrou

15:35-15:55

Transverse spin densities of octet baryons

Speaker

Dr James Zanotti

15:55-16:15

Constructing Nucleon Operators on a Lattice for Form Factors with High Momentum Transfer

Speaker

Sergey Syritsyn

16:15

16:45

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Dr Benoit Blossier

16:45-17:05

Hadron Matrix Elements and the Feynman-Hellman Theorem

Speaker

Andre Walker-Loud

17:05-17:25

Hadron Structure from the Feynman-Hellmann Theorem

Speaker

Mr Alexander Chambers

17:25-17:45

Nucleon structure from 2+1-flavor dynamical DWF ensembles

Speaker

Dr Shigemi Ohta

17:45–18:05

Nucleon Matrix Elements at Physical Point and Cost Comparison**Speaker**

Prof. Keh-Fei Liu

18:05–18:25

Light-cone distribution amplitudes of the baryon octet**Speaker**

Mr Fabian Hutzler

18:25–18:45

Renormalization of three-quark operators for baryon distribution amplitudes**Speaker**

Mr Michael Gruber

18:45

Tuesday 26 July

14:00

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Dr Zohreh Davoudi

14:00–14:20

Disconnected and light connected HVP contributions to the muon anomalous magnetic moment

Speaker

Christoph Lehner

14:20–14:40

The connected and leading disconnected diagrams of the hadronic light-by-light contribution to muon $g-2$

Speaker

Mr Luchang Jin

14:40–15:00

The leading order hadronic contribution of the anomalous magnetic moment of the muon with $O(a)$ -improved Wilson fermions with Pade approximants from fits and time moments

Speaker

Hanno Horch

15:00–15:20

Isospin-breaking effects for meson masses and HVP, from Lattice QCD + quenched QED

Speaker

Mr James Harrison

15:20–15:40

Leading electromagnetic corrections to meson masses and the HVP

Speaker

Ms Vera Guelpers

15:40–16:00

Position-space approach to hadronic light-by-light scattering in the muon $g-2$ on the lattice

Speaker

Mr Nils Asmussen

16:00

16:30

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Sergey Syritsyn

16:30–16:50

Hadronic contribution to the muon magnetic moment at the physical point

Speaker

Dr Taichi Kawanai

16:50–17:10

Moments of the hadron vacuum polarization at the physical point**Speaker**

Dr Kohtaroh Miura

17:10–17:30

The strange and charm contributions to a_μ with physical quark masses using Möbius domain wall fermions**Speaker**

Mr Spraggs Matthew

17:30–17:50

Matching issue in quasi parton distribution approach**Speaker**

Dr Tomomi Ishikawa

17:50–18:10

Partially conserved axial vector current and applications**Speaker**

Dr Holger Perl

18:30

Thursday 28 July

14:00

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Dr Christian Wiese

14:00–14:20

Charge radii and higher electromagnetic moments with lattice QCD in nonuniform background fields

Speaker

Dr Zohreh Davoudi

14:20–14:40

A high-statistics lattice QCD study of nucleon sigma terms

Speaker

Dr Laurent Lellouch

14:40–15:00

Form factors from moments of correlation functions

Speaker

Dr Chia Cheng Chang

15:00–15:20

Nucleon Vector and Axial-Vector Form Factors

Speaker

Dr Yong-Chull Jang

15:20–15:40

Computing the nucleon Dirac radius directly at $Q^2=0$

Speaker

Nesreen Hasan

15:40–16:00

Light and strange axial form factors of the nucleon at pion mass 317 MeV

Speaker

Dr Jeremy Green

16:00

16:30

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Dr Maxwell Hansen

16:30–16:50

Nucleon form factors near the physical point in 2+1 flavor QCD

Speaker

Prof. Yoshinobu Kuramashi

16:50–17:10

Nucleon form factors and couplings with $N_{\mathrm{f}}=2+1$ Wilson fermions

Speaker

Dr Tim Harris

17:10–17:30

Nucleon electromagnetic and axial form factors with $N_{\mathrm{f}}=2$ twisted mass fermions at the physical point

Speaker

Dr Giannis Koutsou

17:30–17:50

Disconnected diagrams with twisted-mass fermions**Speaker**

Dr Alejandro Vaquero

17:50–18:10

Nucleon charges and form factors from clover-on-clover and clover-on-HISQ simulations**Speaker**

Dr Rajan Gupta

18:10–18:30

The Nucleon Axial Form Factor from HISQ**Speaker**

Aaron Meyer

18:30

Friday 29 July

14:00

Hadron Structure

Session |

Location: Highfield Campus, University of Southampton, Building B2a Room 2077, Highfield Campus, Southampton SO17 1BJ, UK |

Convener: Dr Kohtaroh Miura

14:00–14:20 **On the nature of an excited state**

Speaker

Dr Benoît Blossier

14:20–14:40

Estimating excited-state contamination in nucleon correlators using experimental data

Speaker

Dr Maxwell Hansen

14:40–15:00

Electromagnetic pion form factor near physical point in $N_f=2+1$ lattice QCD

Speaker

Mr Junpei Kakazu

15:00–15:20

Pion structure from twisted mass lattice QCD down to the physical pion mass

Speaker

Mr Bartosz Kostrzewa

15:20–15:40

Light-cone distribution amplitudes of the rho meson

Speaker

Meinulf Goeckeler

15:40–16:00

Electromagnetic Form Factors through Parity-Expanded Variational Analysis

Speaker

Mr Finn M. Stokes

16:00

16:30

Hadron Structure

Session | **Location:** Highfield Campus, University of Southampton, Building B2a Room 2077 | **Convener:** Prof. Keh-Fei Liu

16:30–16:50 **First Lattice QCD Study of Gluonic Transversity**

Speaker

Phiala Shanahan

16:50–17:10

Polarizability of pseudoscalar mesons from the lattice calculations

Speaker

Dr Elena Lushevskaya

17:10–17:30

Lattice simulations of vector mesons in strong magnetic field

Speaker
Ms Olga Soloveva

17:30–17:50 **Double Parton Distributions of the Pion**

Speaker
Mr Christian Zimmermann

17:50–18:10 **A study of the radiative transition $\pi \pi \rightarrow \pi \gamma^*$ with lattice QCD**

Speaker
Dr Luka Leskovec

18:10–18:30 **Lattice calculation of the pion transition form factor $\pi^0 \rightarrow \gamma^* \gamma^*$**

Speaker
Dr Antoine Gerardin

18:30