Session Program

Jul 24 – 30, 2016

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

Hadron Structure

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

Mon, July 25

2:15 PM

Hadron Structure

Session |
Location: Highfield Campus, University of Southampton, Building B2a Room 2077, Highfield Campus, Southampton SO17 1BJ, UK |
Convener: Dr Jeremy Green

2:15 – 2:35 PM **The Calculation of Parton Distributions from Lattice QCD**

Speaker
Dr Christian Wiese

2:35 – 2:55 PM **Proton spin decomposition and its perturbative renormalization**

Speaker
Dr YIBO Yang

2:55 – 3:15 PM
Quark orbital dynamics in the nucleon - from Ji to Jaffe-Manohar orbital angular momentum

Speaker
Michael Engelhardt

3:15 – 3:35 PM **Nucleon spin and quark content at the physical point**

Speaker
Prof. Constantia Alexandrou

3:35 – 3:55 PM **Transverse spin densities of octet baryons**

Speaker
Dr James Zanotti

3:55 – 4:15 PM
Constructing Nucleon Operators on a Lattice for Form Factors with High Momentum Transfer

Speaker
Sergey Syritsyn

4:15 PM

4:45 PM

Hadron Structure

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

4:45 – 5:05 PM **Hadron Matrix Elements and the Feynman-Hellman Theorem**

Speaker
Andre Walker-Loud

5:05 – 5:25 PM **Hadron Structure from the Feynman-Hellmann Theorem**

Speaker
Mr Alexander Chambers

5:25 – 5:45 PM **Nucleon structure from 2+1-flavor dynamical DWF ensembles**

Speaker
Dr Shigemi Ohta

5:45 – 6:05 PM **Nucleon Matrix Elements at Physical Point and Cost Comparison**

Speaker
Prof. Keh-Fei Liu

6:05 – 6:25 PM **Light-cone distribution amplitudes of the baryon octet**

Speaker
Mr Fabian Hutzler

6:25 – 6:45 PM
Renormalization of three-quark operators for baryon distribution amplitudes

Speaker
Mr Michael Gruber

6:45 PM

Tue, July 26

2:00 PM

Hadron Structure

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

2:00 – 2:20 PM

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

Speaker
Christoph Lehner

2:20 – 2:40 PM

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

Speaker
Mr Luchang Jin

2:40 – 3:00 PM

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

3:00 – 3:20 PM

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

Speaker
Mr James Harrison

3:20 – 3:40 PM

Leading electromagnetic corrections to meson masses and the HVP

Speaker
Ms Vera Guelpers

3:40 – 4:00 PM

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

Speaker
Mr Nils Asmussen

4:00 PM

4:30 PM

Hadron Structure

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

4:30 – 4:50 PM

Hadronic contribution to the muon magnetic moment at the physical point

Speaker
Dr Taichi Kawanai

4:50 – 5:10 PM **Moments of the hadron vacuum polarization at the physical point**

Speaker
Dr Kohtaroh Miura

5:10 – 5:30 PM
The strange and charm contributions to a_μ with physical quark masses using M\"obius domain wall fermions

Speaker
Mr Spraggs Matthew

5:30 – 5:50 PM **Matching issue in quasi parton distribution approach**

Speaker
Dr Tomomi Ishikawa

5:50 – 6:10 PM **Partially conserved axial vector current and applications**

Speaker
Dr Holger Perlt

6:30 PM

Thu, July 28

2:00 PM

Hadron Structure

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

2:00 – 2:20 PM

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

Speaker
Dr Zohreh Davoudi

2:20 – 2:40 PM

A high-statistics lattice QCD study of nucleon sigma terms

Speaker
Dr Laurent Lellouch

2:40 – 3:00 PM

Form factors from moments of correlation functions

Speaker
Dr Chia Cheng Chang

3:00 – 3:20 PM

Nucleon Vector and Axial-Vector Form Factors

Speaker
Dr Yong-Chull Jang

3:20 – 3:40 PM

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

Speaker
Nesreen Hasan

3:40 – 4:00 PM

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

Speaker
Dr Jeremy Green

4:00 PM

4:30 PM

Hadron Structure

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

4:30 – 4:50 PM

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

Speaker
Prof. Yoshinobu Kuramashi

4:50 – 5:10 PM

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

Speaker
Dr Tim Harris

5:10 – 5:30 PM

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

Speaker
Dr Giannis Koutsou

5:30 – 5:50 PM **Disconnected diagrams with twisted-mass fermions**

Speaker
Dr Alejandro Vaquero

5:50 – 6:10 PM
Nucleon charges and form factors from clover-on-clover and clover-on-HISQ simulations

Speaker
Dr Rajan Gupta

6:10 – 6:30 PM **The Nucleon Axial Form Factor from HISQ**

Speaker
Aaron Meyer

6:30 PM

Fri, July 29

2:00 PM

Hadron Structure

Session |
Location: Highfield Campus, University of Southampton, Building B2a Room 2077, Highfield Campus, Southampton SO17 1BJ, UK |
Convener: Dr Kohtaroh Miura

2:00 – 2:20 PM **On the nature of an excited state**

Speaker
Dr Benoît Blossier

2:20 – 2:40 PM
Estimating excited-state contamination in nucleon correlators using experimental data

Speaker
Dr Maxwell Hansen

2:40 – 3:00 PM
Electromagnetic pion form factor near physical point in $N_f=2+1$ lattice QCD

Speaker
Mr Junpei Kakazu

3:00 – 3:20 PM
Pion structure from twisted mass lattice QCD down to the physical pion mass

Speaker
Mr Bartosz Kostrzewa

3:20 – 3:40 PM **Light-cone distribution amplitudes of the rho meson**

Speaker
Meinulf Goeckeler

3:40 – 4:00 PM
Electromagnetic Form Factors through Parity-Expanded Variational Analysis

Speaker
Mr Finn M. Stokes

4:00 PM

4:30 PM

Hadron Structure

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

4:30 – 4:50 PM **First Lattice QCD Study of Gluonic Transversity**

Speaker
Phiala Shanahan

4:50 – 5:10 PM **Polarizability of pseudoscalar mesons from the lattice calculations**

Speaker
Dr Elena Luschevskaya

5:10 – 5:30 PM **Lattice simulations of vector mesons in strong magnetic field**

Speaker
Ms Olga Soloveva

5:30 – 5:50 PM **Double Parton Distributions of the Pion**

Speaker
Mr Christian Zimmermann

5:50 – 6:10 PM

A study of the radiative transition $\pi \pi \to \pi \gamma^{\ast}$ with lattice QCD

Speaker
Dr Luka Leskovec

6:10 – 6:30 PM

Lattice calculation of the pion transition form factor $\pi^0 \to \gamma^* \gamma^*$

Speaker
Dr Antoine Gerardin

6:30 PM