

Nucleon Spin Structure at Low Q: A Hyperfine View

ECT* workshop program, 02–06 July 2018

Monday

08:50–09:25 **Registration**

09:25–09:30 **Welcome – Organizers**

Chair: Marco Ripani

35+10mins

09:30–10:15 Nucleon spin structure: Highlights and Workshop goals

Marc Vanderhaeghen

10:15–11:00 Overview of new measurements of electromagnetic form factors, polarizabilities and spin structure function functions

Sebastian Kuhn

11:00–11:30 **Coffee break**

11:30–12:15 Proton spin structure in the hyperfine splitting of muonic H

Carl Carlson

12:15–13:00 Lattice QCD of the nucleon spin structure

Huey-Wen Lin

13:00–15:30 **Lunch**

Chair: Alexandre Deur

35+10mins

15:30–16:15 The JLab g2p experiment

Karl Slifer

16:15–17:00 Status of chiral EFT calculations

Vladimir Pascalutsa

17:00–17:30 **Coffee break**

17:30–17:55 Radiative Pion-Photoproduction in covariant chiral perturbation theory

Jan Rijnvee

17:55–18:25 **Discussion: Day 1**

Tuesday

Chair: Karl Slifer

35+10mins

09:30–10:15 Study of Neutron Spin Structure with ^3He

Emanuele Pace

10:15–11:00 Low Q² Spin Moments of neutron and ^3He JLab E97110 experiment

Jian-Ping Chen

11:00–11:30 **Coffee break**

11:30–12:15 Results from the JLab CLAS EG4 experiment

Marco Ripani

12:15–13:00 Generalized polarizabilities and structure functions in chiral EFT

Vadim Lensky

13:00–15:30 **Lunch**

Chair: Vladimir Pascalutsa

15:30–16:15 The HIγS program

Mohammed Ahmed

16:15–17:00 MAMI results for polarizabilities

Philippe Martel

17:00–17:30 **Coffee break**

17:30–18:15 Recent VCS results from MAMI and JLab

Nikos Sparveris

18:15–18:45 **Discussion: Day 2**

Wednesday

Chair: Marc Vanderhaeghen

- 09:30–10:15 Lattice QCD of the nucleon spin structure Constantia Alexandrou
- 10:15–11:00 Nucleon axial charge and the lowest moments of dimension-four operators from lattice QCD Konstantin Ottnad
- 11:00–11:30 **Coffee break**
- 11:30–12:15 Novel calculation of the nucleon FF with Dispersively Improved Chiral EFT Jose Alarcon
- 12:15–12:40 Multipole analysis of Compton scattering Stefano Sconfiatti
- 12:40–13:00 **Discussion: Day 3**
- 13:00–14:00 **Lunch**

Thursday

Chair: Carl Carlson

- 09:30–10:15 Theory of hyperfine structure Krzysztof Pachucki
- 10:15–11:00 Zemach moments of the proton from electron scattering Michael Distler
- 11:00–11:30 **Coffee break**
- 11:30–12:15 Laser spectroscopy of the hyperfine splitting in muonic hydrogen atom by a measurement of decay electron asymmetry Sohtaro Kanda
- 12:15–13:00 PSI experiments Aldo Antognini
- 13:00–15:30 **Lunch**
- Chair: Aldo Antognini**
- 15:30–16:15 NREFT calculations of muH hyperfine structure Antonio Pineda
- 16:15–17:00 Chiral EFT calculations of proton structure effects in muH Franziska Hagelstein
- 17:00–17:30 **Coffee break**
- 17:30–18:15 -
- 18:15–18:45 **Discussion: Day 4**

Friday

Chair: Jian-Ping Chen

- 09:30–10:15 Lattice QCD of the nucleon spin structure Jan C. Bernauer
- 10:15–11:00 Preliminary results from JLab PRad experiment Ashot Gasparian
- 11:00–11:30 **Coffee break**
- 11:30–12:15 Workshop summaries
- 12:15–13:00 **Discussion: Concluding discussion and final remarks**
- 13:00–14:00 **Lunch**