Foreword

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The 21st International Symposium on Spin Physics (SPIN2014) was successfully held on the campus of Peking University, Beijing, China, during October 20–24, 2014. The scientific program of this symposium included many topics related to spin phenomena in particle and nuclear physics as well as those in related fields. The International Spin Physics Symposium series has combined the High Energy Spin Symposia and the Nuclear Polarization Conferences since 2000. The most recent symposia were held in JINR, Dubna, Russia (2012), in Forschungszentrum Jülich, Germany (2010), and in Charlottesville, Virginia, USA (2008).

The symposium was hosted by Peking University, and supported by many renowned research institutions and universities both inside and outside China. The scientific program consisted of plenary sessions and parallel sessions including the following topics:

- Spin structure of hadrons
- Spin structure of nucleon (longitudinal)
- Spin Structure of nucleon (transverse)
- Nucleon structure (form factors, GPDs)
- Spin in hadronic reactions
- Spin physics with photons and leptons
- Spin physics in nuclear reactions and nuclei
- Fundamental symmetries and spin physics beyond the Standard Model
- Accelerator, storage and polarimetry of polarized beams
- Polarized ion and lepton sources and targets
- Future facilities and experiments
- Applications of spin physics

In addition, there were a memorial session in honor of Professor Michel Borghini and a public lecture presented by Professor Qi-Kun Xue at Tsinghua University during the symposium.

The current proceedings comprise written contributions of many presentations during SPIN2014.

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Haiyan Gao & Bo-Qiang Ma

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Parallel Program Conveners:

- S1: Spin Structure of Hadrons (joint)
 — Chuan Liu, Vincenzo Barone, Feng Yuan, Akio Ogawa
- S2: Spin Structure of Nucleon (longitudinal)
 — Renee Fatemi, Jian-Ping Chen, Marco Stratmann
- S3: Spin Structure of Nucleon (transverse)
 — Alexei Prokudin, Zuo-Tang Liang, Andrea Bressan
- S4: Nucleon Structure (form factors, GPDs)
 — Nicole D'Hose, John Arrington, Dieter Mueller, Barbara Pasquini
- S5: Spin in Hadronic Reactions
 — Seonho Choi, Frank Rathmann

S6: Spin Physics with Photons and Leptons

— Michael Ostrick, Reinhard Beck, Mohammad Ahmed

S7: Spin Physics in Nuclear Reactions and Nuclei

— Arnoldas Deltuva, Evgeny Epelbaum, Kimiko Sekiguchi, Zhigang Xiao,

S8: Fundamental Symmetries and Spin Physics Beyond the Standard Model

— Krishna Kumar, Jens Erler, Yuri Obukhov

S9: Accelerator, Storage and Polarimetry of Polarized Beams

— Alexander Chao, Mei Bai, Andreas Lehrach

S10: Polarized Ion and Lepton Sources and Targets

— Matt Poelker, Don Crabb

S11: Future Facilities and Experiments

— Rolf Ent, Jianwei Qiu, Zhengguo Zhao, Alexander Nagaytsev

S12: Applications of Spin Physics

— Gordon Cates, Warren Warren (medical),

— Guilu Long and Xincheng Xie (quantum info),

— Xi Chen and Ruirui Du (CMP)

Public Lecture — Zhigang Xiao, Haiyan Gao

Borghini Memorial Session — Alan Krisch, Akira Masaike

Poster Session — Xiaomei Li

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The websites of Spin2014: <http://www.phy.pku.edu.cn/spin2014/>
<http://indico.cern.ch/event/284740/>

Conference site of SPIN2014

Conference photo of SPIN2014