



# Report from International Spin Physics Committee (ISPC) since Spin 2018

Haiyan Gao **BNL & Duke University** 

October 18-22, 2021 Spin 2021 Symposium













#### **PSTP2019**



- ➤ Sept 22<sup>nd</sup> to Sept 27<sup>th</sup>, 2019
- Hosted by Oak Ridge National Laboratory
- Held in Knoxville TN
- Presentations at the Downtown Knoxville Holiday Inn Convention Center.

Josh Pierce Neutron Technologies Division Oak Ridge National Laboratory



# PSTP 2019 Program

- ➤ 60 Scientific talks (some cancelled for VISA issues), broadly grouped into 7 categories + a special EIC session:
  - ➤ Polarized Sources 7 talks
  - ➤ Polarimetry 8 talks
  - ➤ Polarized Gas Targets 2 talks
  - ➤ Solid Polarized Targets 15 talks
  - ➤ Polarized Neutrons 13 talks
  - ➤ Fundamental Symmetry Tests 8 talks
  - ➤ New Applications 3 talks
  - \*EIC Special Session\* 6 talks
- A Retrospective Session Focusing on Polarized Targets and the role of Donald Crabb in their development
- Oak Ridge National Laboratory Tour Tour included the Spallation Neutron Source and the Graphite Reactor historical site

Special thanks to Josh Pierce, LOC, program committee and all participants!





#### SPIN symposium in Japan



- Osaka in 2000
- Kyoto in 2006
- Proposal in Matsue (Shimane prefecture) in 2020
  - September 28<sup>th</sup> (Mon) October 2<sup>nd</sup> (Fri), 2020
  - (or September 21 25, 2020)
- Hosted by RIKEN Nishina Center
- Other international conferences hosted by RIKEN Nishina Center
  - INPC 2006 (Tokyo) INPC 2007
  - EMIS 2012 (Matsue)
  - ARIS 2014 (Tokyo)
  - QM 2015 (Kobe)
  - MENU 2016 (Kyoto)



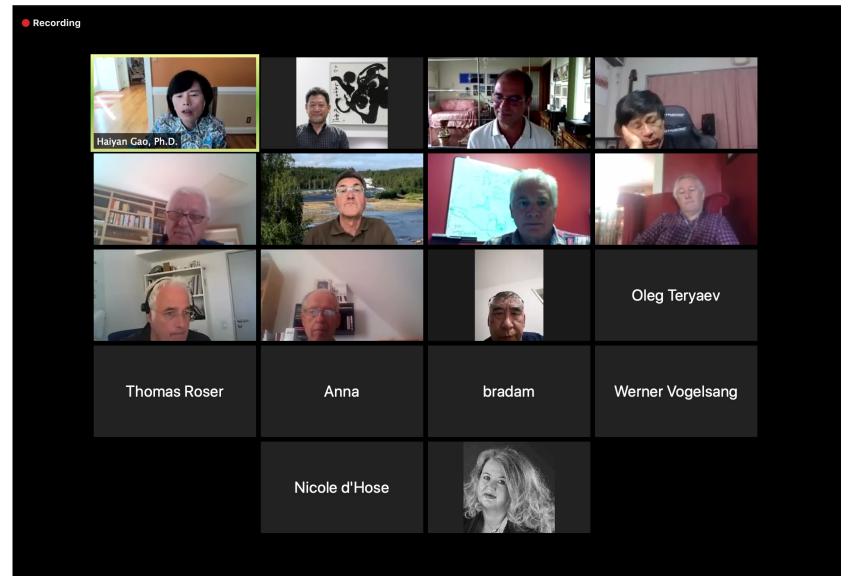
September 11, 2018

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The 24th Spin Symposium was planned originally for Fall 2020, then COVID-19 global pandemic hit us



### ISPC (Zoom) Meeting September 2020





## Spin 2021 and beyond, PSTP workshop

- Currently the 24<sup>th</sup> Spin Symposium (Spin 2021) is tentatively booked for Oct 17-23, 2021, Matsue, Japan. But the status is considered undetermined due to the evolving nature of covid-19
- At the chair-line meeting in May, we discussed the online meeting format, which can be an option (backup). The host will arrange the program schedule following the local time, but taking into account participants are international
- ➤ Going forward, the next PSTP will be in 2022, and the 25<sup>th</sup> Spin symposium will be in 2023

(Presented at the September 2020 Zoom ISPC meeting)

We thank our Japanese colleagues for their heroic efforts in organizing this successful Spin2021 (hybrid-format) symposium



#### **SPIN2021**

This symposium is mainly hosted by RIKEN Nishina Center and co-hosted by following institutions



This Symposium is a part of the RIKEN Symposium Series Supported by subsidy system for international conferences from Matsue city and Shimane prefecture





- •T. Uesaka (RIKEN, co-chair)
- •Y. Goto (RIKEN, co-chair)
- •T. Doi (RIKEN)
- •Y. Ichikawa (Kyushu Univ.)
- •H. Kohri (RCNP, Osaka)
- •T. Mibe (KEK/JPARC)
- •Y. Miyachi (Yamagata)



- •H. Nagahama (CNS)
- •I. Nakagawa (RIKEN)
- •M. Sasano (RIKEN)
- •R. Seidl (RIKEN)
- •A. Tamii (RCNP, Osaka)
- •K. Tateishi (RIKEN)
- •Y. Watanabe (RIKEN)
- •J. Zenihiro (Kyoto Univ.)

Heroic efforts by LOC Thank you very much!

#### Thank you, program committee for the wonderful program!

- •J. H. Ardenkjaer-Larsen (DU Denmark)
- •M. Bai (GSI, Germany)
- •D. Boer (Groningen, Netherlands)
- •W.-C. Chang (Academia Sinica, Taiwan) •C. Riedl (UIUC, USA)
- •S. Choi (Seoul, Korea)
- •T. Doi (RIKEN)
- •H. En'yo (RIKEN)
- •R. Fatemi (Kentucky, USA)
- Y. Furletova (JLab, USA)
- •Y. Goto (RIKEN)
- •Y. Ichikawa (RIKEN)
- •T. Iwata (Yamagata)
- •K. Kakurai (CROSS)
- •S. Kumano (KEK)
- •B.-Q. Ma (Peking, China)
- •T. Mibe (KEK)

- •I. Nakagawa (RIKEN)
- B. Pasquini (Pavia, Italy)
- •A. Prokudin (Penn State Berks, USA)
- •N. Saito (J-PARC)
- Y. Sakemi (CNS, Tokyo)
- •M. Sasano (RIKEN)
- •R. Seidl (RIKEN)
- •K. Sekiguchi (Tohoku)
- •T.-A Shibata (Nihon)
- •H. M. Shimizu (Nagoya)
- •A. Tamii (RCNP, Osaka)
- •K. Tateishi (RIKEN)
- •T. Uesaka (RIKEN)
- •T. Wakasa (Kyushu)
- •X.-N. Wang (LBNL, USA)



#### We thank all the conveners

- Nucleon helicity structure
  - M. Zurek (ANL)
- 3D structure of the nucleon: TMDs
  - S. Yoshida (SCNU)
  - M. Chiosso (Torino)
- 3D structure of the nucleon: GPDs and form factors
  - W.-C. Chang (Academia Sinica)
  - M. Boer (JLab)
- Fundamental symmetries and spin physics beyond the Standard Model
  - S. Kawasaki (KEK)
  - H. Liu(UMass Amherst)
- Spin physics in nuclear reactions and nuclei
  - G. Georgiev (IJCLab, Orsay)
  - S. Sakaguchi (Kyushu)

- Low energy spin physics with lepton, photon and hadron probes
  - H. Kohri (RCNP)
- Applications of nuclear polarization techniques to other fields
  - T. Kumada (JAEA)
  - P. Hautle (PSI)
- Polarized ion and lepton sources and targets
  - S. Ikeda (BNL)
  - G. Nukazuka (RIKEN)
- Future facilities and experiments
  - T. Horn (CUA)
  - K. Nakano (Virginia)
- Acceleration, storage and polarimetry of polarized beams
  - V. Ranjbar (BNL)
  - M. Fukuda (RCNP)



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# We thank all Spin 2021 participants

Onsite (in-person) ~20

Online (remote) presenter ~120

Online (remote) presenter student ~40

Online (remote) listener ~150

Total ~330

#### About 200 contributions (plenary + parallel)

- Abstract book: <a href="https://indico2.riken.jp/event/3082/attachments/9205/14987/book-of-abstracts.pdf">https://indico2.riken.jp/event/3082/attachments/9205/14987/book-of-abstracts.pdf</a>
- No poster session



### ISPC Meeting Oct 20, 2021





#### Hosting PSTP 2022 at Helmholtz-Institut Mainz

#### Kurt Aulenbacher

Institut für Kernphysik, Johannes Gutenberg-Universität, Mainz, Germany

Frank Rathmann

Institut für Kernphysik, Forschungszentrum Jülich, Jülich Germany

Meeting of the International Spin Physics Committee
October 20, 2021









Workshop on Polarized Sources, Targets, and polarimetry (PSTP 2022)



Mainz, one of the oldest towns in Germany

- ▶ Located in Rhine valley, surrounded by famous landscape and historic sites
- ▶ Invention of first printing machine by Johannes Gutenberg in the 15<sup>th</sup> century
- ▶ University founded in 1477 (1946 named after Johannes Gutenberg):
  - More than 30.000 Students
  - Strong natural sciences faculties with high-energy physics (Cluster of Excellence PRISMA+)
  - Accelerators devoted to spin-physics experiments: Mainz Microtron and energy-recovering accelerator MESA (https://university.uni-mainz.de)
  - Campus home to MPIs for Chemistry and Polymer Research, Institute for Molecular Biology, and research reactor TRIGA
  - ▶ Premises of HIM, located on campus, offer all facilities needed for workshops with up to 100 participants
- ► Tentative date: 26.09.2022 to 02.10.2022 (KW39)
- Conference dinner
- Possible excursion destinations:



Old town



Old Market place with Cathedral and Gutenbergs Monument



Johannisberg Castle in the Rheingau



Bible on display in the Gutenberg Museum at Mainz



# Spin 2023

Location: Two options

 Washington Duke Hotel & Conference Center (near Duke Campus)

Durham Conference Center (Downtown Durham)

Dates: September 24-29, 2023

Organizing Institution: Duke University

Co-chairs: Anselm Vossen, Tom Mehen











# Thank you!



Starting Jan 1, 2022, Paolo Lenisa will become the Chair of ISPC Haiyan Gao will become past Chair