

Recent Invited Talks by Haiyan Gao

August 2024

1. “Overview of the Solenoidal Large Intensity Device (SoLID) Physics Program”, Invited talk at the 12th Workshop on Hadron physics and Opportunities Worldwide, Aug 5-9, 2024, Dalian, China.
2. “Solenoidal Large Intensity Device (SoLID) Experiments”, Invited talk at the 7th International Workshop on Transverse phenomena in hard processes and the transverse structure of the proton, June 3-7, 2024, Trieste, Italy.
3. “The Electron-Ion Collider”, Nelson Lecture, Georgia State University, April 2nd, 2024.
4. “The Proton Charge Radius and the PRad Experiment”, Invited talk at the Physics at AMBER international Workshop 2024, Geneva, Switzerland, March 18-20, 2024.
5. “The Electron-Ion Collider”, Special Director’s Colloquium, Argonne National Laboratory, March 7th, 2024.
6. “Future Directions in Hadron Physics (Experiment)”, Invited plenary talk at the 15th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei (EINN 2023), October 31 to November 4, 2023, Paphos, Cyprus.
7. “The Proton Charge Radius”, Invited talk at 44th International School of Nuclear Physics, September 18-23, 2023, Erice, Italy.
8. “Recent results on the proton charge radius and polarizabilities”, Invited plenary talk at the 25th European Conference on Few-body Problems in Physics, July 30 - August 4, 2023, Mainz, Germany.
9. “My Journey in Physics and Beyond”, BWIS Lecture Series, July 27, 2023, Brookhaven National Laboratory.
10. “Highlights from RHIC”, Invited plenary talk at the 20th International Conference on Hadron Spectroscopy and Structure (Hadron2023), June 5-9, 2023, Genova, Italy.
11. “Update on the EIC”, Virtual presentation to the IUPAP WG.9 Annual General Meeting in Avignon, France, June 3, 2023.
12. “Nuclear Science Long Range Plan and Computing”, Invited plenary talk at the 26th International Conference on Computing in High-Energy and Nuclear Physics, May 8-May 12, 2023, Norfolk, Virginia.
13. “The Electron-Ion Collider”, Colloquium, Enrico Fermi Institute, Univ. of Chicago, IL, May 1, 2023.
14. “The structure of the nucleon”, the 39th Axel Memorial Lecture, University of Illinois, Urbana-Champaign, IL, March 29, 2023.
15. “The Structure of the Nucleon”, Colloquium, Dept. of Physics and Astronomy, UCLA, March 9th, 2023.

16. “Physics Program with Solenoidal Large Intensity Device (SoLID)”, HIT Seminar, Nuclear Science Division, Lawrence Berkeley National Laboratory, March 7th, 2023.
17. “The Structure of the Nucleon”, Colloquium, Dept. of Physics, Univ. of Kansas, March 6th, 2023.
18. “Nuclear Physics - The Structure of Nucleon”, 2 lectures delivered virtually at the 7th edition of the biennial African School of Fundamental Physics and Applications (ASP 2022), November 28-December 9, 2022, Nelson Mandela University in Gqberha, South Africa.
19. “The experimental status of the proton charge radius”, Invited plenary talk at the The 13th International Workshop on the Physics of Excited Nucleons (NSTAR 2022), Oct 17-21, 2022, Santa Margherita Ligure, Genova, Italy.
20. “Madame Chien-Shiung Wu - My Role Model in Physics”, (virtual) plenary presentation at the International Forum on the 110th birth anniversary in honor of Madame Chien-Shiung Wu”, September 24, 2022.
21. “Results Results from RHIC”, Invited plenary talk at the 9th International Conference on Quarks and Nuclear Physics (QNP2022, online), September 5-9, 2022.
22. “The Electron-Ion Collider (EIC): the Next QCD Frontier”, Invited plenary talk at Transversity 2022, May 23-27, 2022, Pavia, Italy.
23. “The EIC Detector Selection process; and the Path to a Possible Second Detector”, invited talk at the Workshop on Perceiving the Emergence of Hadron Mass through Amber@CERN, May 9-13, 2022.
24. “TMDs in SIDIS Experiments and more”, 2 Lectures delivered virtually at the TMD Winter School, Santa Fe, New Mexico, Jan 20-26, 2022.
25. “The Electron-Ion Collider (EIC)”, Invited plenary talk at the 30th International Symposium of Lepton Photon Interactions at High Energies, Jan 10-14, 2022 (virtual).
26. “Experimental status on the Proton Charge Radius”, invited plenary talk at the 10th International Workshop on Chiral Dynamics (CD2021), November 15-19th, 2021, Beijing, China.
27. “Double-polarized photo-disintegration of ^3He at $\text{HI}\gamma\text{S}$ ”, invited talk at the Workshop on Exploring QCD with Tagged Processes”, Oct 11-22, 2021, Institut Pascal, France.
28. “Selected topics in hadronic and nuclear physics”, invited talk at the Symposium on QCD and Nuclei, A celebration of nuclear physics research, Oct 10, 2021, MIT.
“Physics at Brookhaven National Laboratory - from Relativistic Heavy Ion Collider to an Electron-Ion Collider”, Colloquium (zoom), Physics Department, North Carolina A&T, September 15, 2021.
29. “Experimental status of the proton radius”, invited plenary talk at the 22nd Particles and Nuclei International Conference (PANIC2021), September 5-10th, 2021, Lisbon, Portugal.
30. “SIDIS with Solenoidal Large Intensity Device (SoLID) — Brief Overview”, May 6-7, 2021, invited talk at the workshop on TMD studies: from JLab to EIC (virtual).
31. “Overview of the proposed Solenoidal Large Intensity Device (SoLID) and its physics programs at Jefferson Lab”, Invited talk at the APS April 17-20, 2021 meeting (virtual).
32. “The proton remains puzzling”, Colloquium (zoom), Physics Department, University of Michigan, February 17, 2021.
33. “The physics programs with the SoLID device proposed for JLab 12-GeV”, invited talk at the International Workshop on Hadron Structure and Spectroscopy, November 16-18, 2020, Trieste, Italy (remote).

34. “The proton remains puzzling”, Colloquium (zoom), Seminar, Shanghai Jiaotong University, Nov. 5, 2020.
35. “The proton remains puzzling”, Colloquium (zoom), Physics Department, Michigan State University, Oct. 1, 2020.
36. “Overview of studies of TMDs at JLab and EIC from SIDIS”, invited talk at the RBRC Jet Observables at the Electron-Ion Collider Workshop on July 27-29, 2020 (virtual).
37. “The proton remains puzzling”, Virtual Colloquium, Peking University, May 28, 2020.
38. “Amazing journeys in physics and in building a joint-venture university”, the 14th Tsinghua Top+Talk, May 10, 2020 (virtual).
39. “The proton remains puzzling”, Colloquium, Physics Department, Duke University, February 19, 2020.
40. “The proton charge radius – Result from the PRad Experiment”, Invited talk at the “Workshop on Correlations in Partonic and Hadronic Interactions (CPHI-2020)”, Feb 3-7, 2020, CERN, Geneva, Switzerland.
41. “The proton remains puzzling”, Colloquium, Physics Division, Brookhaven National Laboratory, January 7, 2020.
42. “The proton remains puzzling”, Physics Division Seminar, Argonne National Laboratory, Nov 11, 2019.
43. “Advances and Challenges in the Experimental Studies of Nucleon Transversity”, invited talk at the Workshop on Strong QCD from Hadron Structure Experiments, Jefferson Lab, Nov 6-10, 2019.
44. “The proton remains puzzling”, Colloquium, Department of Physics, MIT, Oct 24, 2019.
45. “The Result on the Proton Charge Radius from the PRad Experiment”, invited talk at the Fall DNP meeting, Arlington, VA, October 14-17, 2019.
46. “The Proton Charge Radius (PRad) Experiment at JLab”, invited talk at the 11th Workshop on Hadron Physics in China and Opportunities Worldwide, Tianjin, China, August 22-28, 2019.
47. “The Proton Charge Radius (PRad) Experiment at JLab”, invited talk at the 29th International Nuclear Physics Conference (INPC 2019), Glasgow, UK, July 27 - August 2, 2019.
48. “The proton charge radius puzzle”, Colloquium, April 26, 2019, the University of Chinese Academy of Sciences, China.
49. “The Proton Charge Radius (PRad) Experiment at JLab”, invited talk at the 8th Workshop of the APS Topical Group on Hadronic Physics, April 10-12, 2019, Denver, CO, USA.
50. “The proton charge radius puzzle”, Colloquium, April 1, 2019, Duke Kunshan University, China.