2023 Hall A Winter Meeting

Welcome!

Hall A CC Jan 26 - 27, 2023 @ CEBAF F113







Code of conduct Adapted from APS meeting code

Participants will avoid any inappropriate actions or statements based on individual characteristics such as age, race, ethnicity, sexual orientation, gender identity, gender expression, marital status, nationality, political affiliation, ability status, educational background, or any other characteristic protected by law. Disruptive or harassing behavior of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behavior and language, unwelcome jokes or comments, unwanted touching or attention, offensive images, photography without permission, and stalking.

Violations of this code of conduct policy should be reported to meeting organizers. Sanctions may range from verbal warning, to ejection from the meeting, to notifying appropriate authorities. Retaliation for complaints of inappropriate conduct will not be tolerated. If a participant observes inappropriate comments or actions and personal intervention seems appropriate and safe, they should be considerate of all parties before intervening.

Logistics

- Please register: <u>Link</u>
- Speakers: please upload your slides to indico
- In-person/zoom: raise hands for questions
- Zoom: mute your mic
- All talks will be recorded on zoom.
- Coffee breaks at 8:45am, 10:30am, 3:30pm ET
- Collaboration Picture: 11:40am (Jan 26th)
- Special seminars at noon:
- 12:00 → 13:00 Student Lunch Seminar: Data Scientist's Approach of Nuclear Physics (Host: Carlos Ayerbe Gayoso)

Convener: Malachi Schram (Thomas Jefferson National Accelerator Facility)

12:15 → 13:00 Theory Seminar: The advantage and impact of extracting strange quark content and distribution of proton from PVDIS experiment"

Convener: Bishnu Pandey

Speaker: Nobuo Sato (Jefferson Lab)



Hall A Coordinating Committee

Current Membership (July 1, 2022 - July 1, 2023)

Chairperson	Shujie Li, Lawrence Berkeley National Laboratory, shujie@jlab.org
Secretary	Peter Monaghan, Christopher Newport University, peter@jlab.org
Member-at-Large	Carlos Ayerbe Gayoso, College of William and Mary, gayoso@jlab.org
Member-at-Large	Bishnu Datt Pandey, Hampton University, bpandey@jlab.org

Big thanks to Mark Jones, Sadie Cherry, and Devi Adhikari!

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Business Meeting

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New Publications

Factor of 48Ca

Precision Moller polarimetry for PREX-2 and CREX	Donald Jones, James Napolitano, Kent Paschke, William Henry, Sanghwa Park and Others	Jan 2023	JLAB-PHY-22-3655
Determination of the titanium spectral function from (e,e'p) data	Jiang Libo, Liyang Jiang, Artur Ankowski, Daniel Abrams, Linjie Gu and Others	To Appear in 2022	JLAB-PHY-22-3726
Precise Beam Energy Determination for Hall A after the 12GeV Upgrade	Sandra Santiesteban, Lucas Tracy, David Flay, Douglas Higinbotham, Dominique Marchand and Others	To Appear in 2022	JLAB-PHY-21-3523
Concept of Very-Asymmetric Lepton Collider for Dark Matter Search	Vasiliy Morozov and Bogdan Wojtsekhowski	To Appear in 2022	JLAB-PHY-22-3593, JL
High-Accuracy Absolute Magnetometry with Application to the Fermilab Muon \$g-2\$ Experiment	David Flay, D. Kawall, T. Chupp, S. Corrodi, M. Farooq and Others	Dec 2022	JLAB-PHY-22-3461
Accurate Determination of the Electron Spin Polarization In Magnetized Iron and Nickel Foils for Moller Polarimetry	David Gaskell, William Henry, Donald Jones, David King, Paul Souder and Others	Nov 2022	JLAB-PHY-22-3581
The Proton Spin Structure Function g2 and Generalized Polarizabilities in the Strong QCD Regime	David Ruth, Ryan Zielinski, Chao Gu, Melissa Cummings, Toby Badman and Others	Oct 2022	JLAB-PHY-22-3607
Dark matter search with the BDX-MINI experiment	marco battaglieri, Mariangela Bondi, Andrea Celentano, P. Cole, Marzio De Napoli and Others	Oct 2022	JLAB-PHY-22-3674
Revealing the short-range structure of the mirror nuclei 3H and 3He	S. Li, R. Cruz-Torres, N. Santiesteban, Z. Ye, D. Abrams and Others	Aug 2022	JLAB-PHY-22-3577
Search for a bound di-neutron by comparing \$^3\$He(e,e'p)d and \$^3\$H(e,e'p)X measurements	Dien Nguyen, Carmel Neuburger, Reynier Cruz Torres, Axel Schmidt, Douglas Higinbotham and Others	Aug 2022	JLAB-PHY-21-3505
Precision Determination of the Neutral Weak Form	Devi Adhikari, Hisham Albataineh, Darko Androic,	Jul 2022	JLAB-PHY-22-3642

Konrad Aniol, David Armstrong and Others

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https://ballawah.ilah.arg/s	Please contact Mark Jones to be added in	the Hall A webs			
High-Accur to the Ferm Accurate D Polarizatior Moller Pola https://hallaweb.jlab.org/publications/ Consider submitting the paper with the Hall A Collaboration, follow the guidelines summarized in the charter: https://hallaweb.jlab.org/collab/charter/charter-2021.pdf					
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Theses

A Strong-QCD Regime Measurement of the Proton's Spin Structure	David Ruth	Dec 2022	Thesis	JLAB-PHY-22 -3762
CREx Transverse Asymmetry Measurements	Robert Radloff	Aug 2022	Thesis	JLAB-PHY-22 -3611
Elastic Electron Scattering From Mirror Nuclei 3He and 3H	Leiqaa Kurbany	Dec 2022	Thesis	TBD

JLab publication database:

https://misportal.jlab.org/ul/publications/search/adv anced_search.cfm



208 members, 70+ institutions

Membership database:

https://misportal.jlab.org/mis/apps/physics/collab oration_membership/index.cfm?collabId=HALL% 20A

Please check if your information is up-to-date!





New member policy:

- Students
- Become members through request by PhD supervisor/sponsor (no vote needed)
- -Please remember to update membership when graduating

- New full members
- Nominated by sponsor, voted in the collaboration meeting

New member nominations:

• Grad Students (7)

Name	Institution	Position	Experimental Involvement	Advisor
Brandon Parris	UConn	grad student	SBS-GEP	Andrew Puckett
Nikolas (Kip) Hunt	UConn	grad student	SBS-GEP	Andrew Puckett
Faraz Chahili	Syracuse U.	grad student	Moller polarimetry/SBS	Paul Souder
John Boyd	UVA	grad student	nTPE, GMn	Nilanga Liyanage
Sean Jeffas	UVA	grad student	GEn-II	Nilanga Liyanage
Vimukthi Gamage	UVA	grad student	GEn-RP, GEp-V	Nilanga Liyanage
Bhasitha Dharmasena	UVA	grad student	GEp-V	Nilanga Liyanage

New member nominations:

• New full members vote (5):

Name	Institution	Position	Experimental Involvement	Nominated by
Aruni Nadeeshani	MSU	postdoc	TDIS	Dipangkar Dutta
Stephen Kay	Regina	postdoc	SoLID	Garth Huber
Rupesh Dotel	UConn	postdoc	SBS-GEP	Andrew Puckett
		Research	SBS, GEn-II, GMn,	
Huong Nguyen	UVA	scientist	GEp-V, GEn-RP	Nilanga Liyanage
Oliver Jevons	Glasgow U.	postdoc	APEX and SBS	David Hamilton

Thank you!