

Welcome to the Hall A Winter Collaboration Meeting!

Highlights

- ❖ 63 Registered Participants
- ❖ Update and Status of Jefferson Lab from Lab Director Kim Sawyer
- ❖ Analysis updates and overview of upcoming experiment of **SBS** program
- ❖ Status and plans for the upcoming **Moller** experiment
 - Injector status and upgrades
- ❖ Recent updates on the **SoLID** project

Chairperson	Michael Nycz, University of Virginia mnycz@jlab.org
Secretary	Arun Tadepalli, Jefferson Lab, arunts@jlab.org
Member-at-Large	Devi Adhikari, Virginia Tech, adhidevi@vt.edu
Member-at-Large	Eric Fuchey, College of W&M, efuchey@jlab.org

Invited Talks

- Dennis Sivers (University of Michigan and Portland Physics Institute)
 - **2:00 pm** today (January 15): F113
 - "Angular Momentum in Quantum Gauge Theory"

The concept of "spin" was invented in the first part of the 20th century when it was realized that if the angular momentum of the electron was associated with a spinning ball, the surface of the ball would be travelling faster than the speed of light. In quantum mechanics we separate fundamental objects into fermions and bosons. Fermions occupy space and are subject to the Pauli Exclusion Principle. Bosons permeate space and can form condensates where coherence deflects the concept of particle number. Gauge field theories combine fermions and bosons in very specific ways and the self-duality of the gauge sector of the Standard Model relates the quantization of charge to the quantization of angular momentum.

- Ian Cloet (Deputy Division Director and Group Leader, Argonne National Laboratory)
 - **1:45 pm** tomorrow (January 16): F113
 - "Revealing the Quarks & Gluons in Nuclei at Hall A"

The study of nuclei from the perspective of the quark and gluon degrees of freedom remains a rich frontier in nuclear physics. Jefferson Lab is at the luminosity frontier and is the leading facility to explore the explicit role of QCD in nuclei, where many new discoveries and deep insights remain possible. This talk will explore some of the opportunities to study QCD in nuclei, with a focus on Hall A, and discuss the associated insights into quark and gluon dynamics in nuclei.

Miscellaneous

Group Photo

- Today - 10:05 am (Before the coffee break)



Social Gathering

- Today - 5:30 pm at the RESFAC



Last Call for Nominations

- ❖ If there are any graduate students, postdocs, etc... that you would like to nominate to membership in Hall A
 - Please email me names and information before 11:00 am (today)

Note to Presenters

- ❖ Please upload your slides before the start of your session
- ❖ If you have any issues uploading, please email them to:
 - mnych@jlab.org
 - arunts@jlab.org
 - efuchey@jlab.org
 - adhidevi@vt.edu

Thank you to the Hall A Collaboration Coordination
Committee & Mark Jones!

Question or comments before we begin?