

# CLAS Collaboration Meeting

March 5-8, 2019



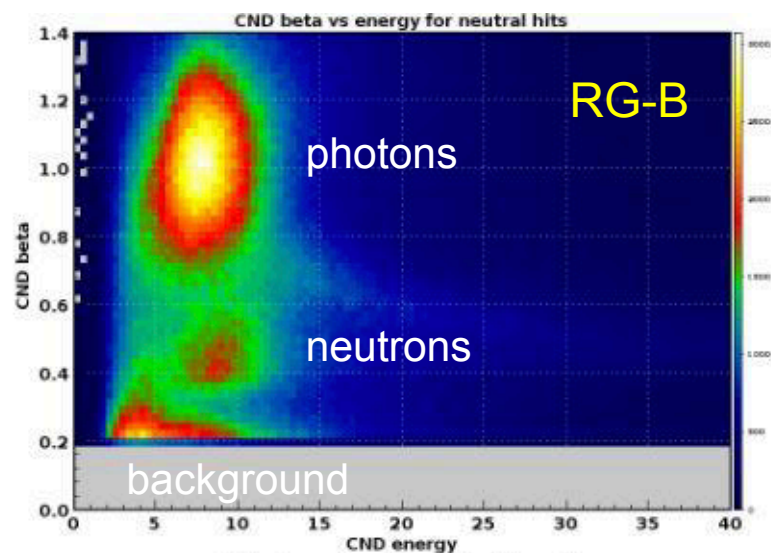
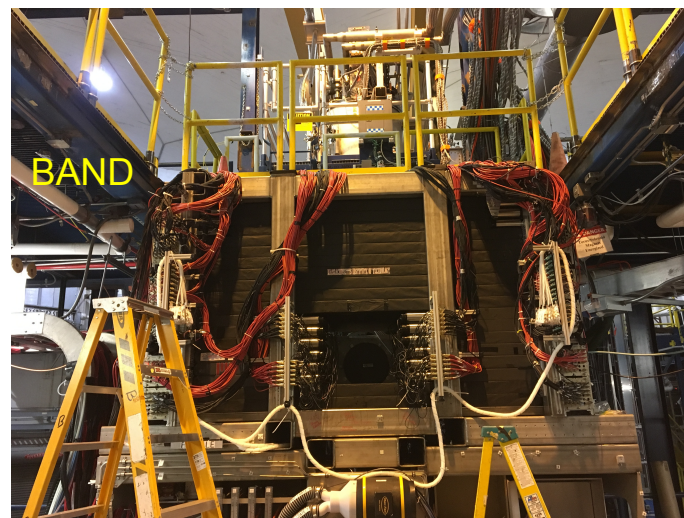
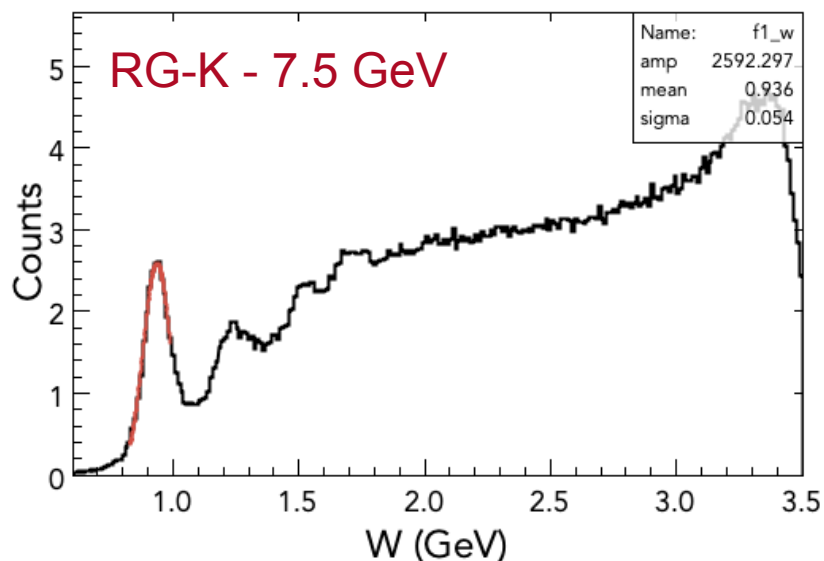
# Outline

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- Events since last meeting
- Collaboration business
- New CLAS publications
- From Jlab User Organization
- Meeting agenda

# Since the last meeting...

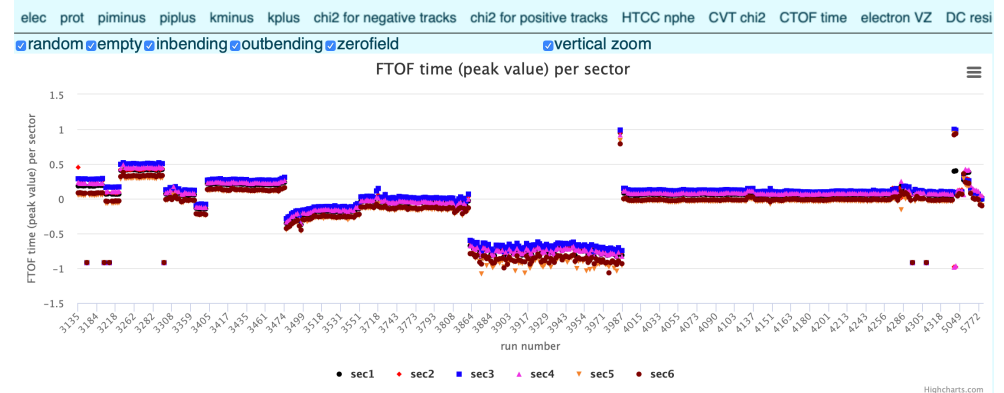
- Completed Fall RG-A run and first RG-K run
- BAND detector installed
- First RG-B run in progress
- Significant progress on CLAS12 offline software, reconstruction, calibration, alignment, ...
- Data processing started



# RG-A data processing started

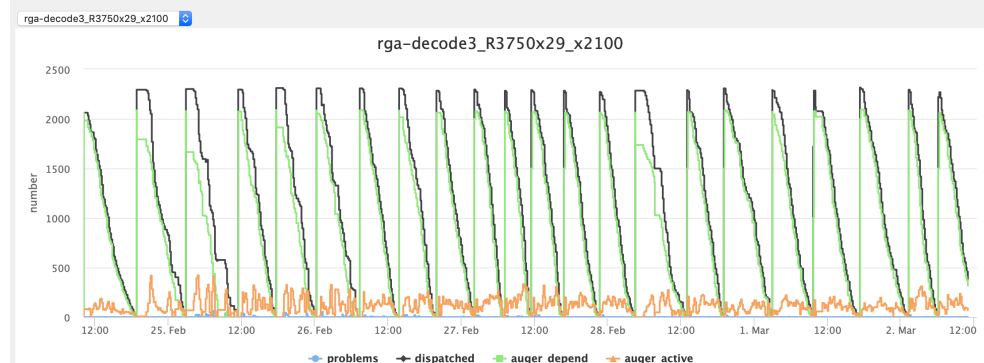
- Calibration and alignment of RG-A and RG-K data progressing
- Second pass0 of RG-A Spring data recently completed
- Massive decoding of RG-A Spring data in progress
- More details in CLAS12 and Software sessions today and tomorrow

FTOF vertex time vs. Run Number



RG-A decoding status

workflow_name	jobs	succeeded	success	attempts	phase	dispatched	depend	active	update_date	current_date
rga-decode3_R3750x29_x2100	66583	49920	75.0%	51474	22	386	317	69	Mar 2,2019 10:58	Mar 2,2019 11:00
rga-decode2_R3464x28_x1300	66415	66415	100.0%	66998	58	0	0	0	Feb 24,2019 04:54	Feb 24,2019 05:00
rga-decode1_R3432x25_x1300	64076	64074	100.0%	79290	52	0	0	0	Feb 11,2019 15:03	Feb 11,2019 17:42
rga-decode4_R3501x30_x1300	67620	0	0.0%	0	0	0	0	0	Jan 30,2019 20:15	Jan 30,2019 20:18
rga-decode5_R3355x30_x1300	65222	0	0.0%	0	0	0	0	0	Jan 30,2019 19:21	Jan 30,2019 19:22
rga-decode6_R3466x34_x1300	67649	0	0.0%	0	0	0	0	0	Jan 30,2019 19:13	Jan 30,2019 19:16
rga-decode7_R3249x43_x1300	67252	0	0.0%	0	0	0	0	0	Jan 30,2019 19:05	Jan 30,2019 19:06
rga-decode8_R3191x65_x1300	65648	0	0.0%	0	0	0	0	0	Jan 30,2019 19:00	Jan 30,2019 19:02
rga-decode9_R3135x178_x1300	62672	0	0.0%	0	0	0	0	0	Jan 30,2019 18:56	Jan 30,2019 18:58



# Updated experiment schedule

- Schedule for the 2019 updated to compensate for the delayed start of in January:

[https://www.jlab.org/exp\\_prog/experiment\\_schedule/](https://www.jlab.org/exp_prog/experiment_schedule/)

- Extension of 1 week in April
- Schedule for Fall 2019 and 2020 remains unchanged
- Additional shifts being filled by volunteers

<https://www.jlab.org/Hall-B/shifts/>

Date	Expert Owl (00:00-08:00)	Expert Day (08:00-16:00)	Expert Swing (16:00-24:00)	Worker Day (07:00-15:00)	Worker Swing (15:00-23:00)	Worker Owl (23:00-07:00)	Accelerator Schedule/ Hall B Program
2-Apr-2019 Tuesday	Nikolay Markov	ODU	Ahmed El Alaoui	JLAB	ODU	Kevin Wei	RG-A
3-Apr-2019 Wednesday	Nikolay Markov	ODU	Ahmed El Alaoui	JLAB	ODU	Kevin Wei	RG-A
4-Apr-2019 Thursday	Nikolay Markov	ODU	Ahmed El Alaoui	JLAB	ODU	Kevin Wei	RG-A
5-Apr-2019 Friday	Nikolay Markov	ODU	Ahmed El Alaoui	JLAB	ODU	Kevin Wei	RG-A
6-Apr-2019 Saturday	Zhiwen Zhao	Volker Burkert	Cole Smith	ODU	MIT	ODU	RG-A
7-Apr-2019 Sunday	Zhiwen Zhao	Volker Burkert	Cole Smith	ODU	MIT	ODU	RG-A
8-Apr-2019 Monday	Zhiwen Zhao	Yuri Gotra	Cole Smith	ODU	MIT	ODU	RG-A
9-Apr-2019 Tuesday	Zhiwen Zhao	Yuri Gotra	Cole Smith	ODU	MIT	ODU	RG-A
10-Apr-2019 Wednesday	Volunteer	Volunteer	Brandon Clary	Jose Carvajal	LamyaAbudaker A Baashen	Volunteer	DOWN
11-Apr-2019 Thursday	Volunteer	Volunteer	Brandon Clary	Jose Carvajal	LamyaAbudaker A Baashen	Volunteer	DOWN
12-Apr-2019 Friday	Volunteer	Volunteer	Brandon Clary	Jose Carvajal	LamyaAbudaker A Baashen	Bidyut Roy	DOWN
13-Apr-2019 Saturday	Volunteer	Volunteer	Brandon Clary	Jose Carvajal	LamyaAbudaker A Baashen	Bidyut Roy	DOWN
14-Apr-2019 Sunday	Volunteer	Volunteer	Brandon Clary	Jose Carvajal	LamyaAbudaker A Baashen	Bidyut Roy	DOWN
15-Apr-2019 Monday	Volunteer	No shift	No shift	No shift	No shift	No shift	DOWN
16-Apr-2019 Tuesday	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	DOWN
17-Apr-2019 Wednesday	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	DOWN
18-Apr-2019 Thursday	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated	DOWN

# Shift Exemption for Russian Inst.

- Scientists from Russian Institutes have not been able to visit the Lab over the last 24 months because of difficulties in obtaining the visit authorization from DOE
- This affects our colleagues from ITEP and MSU (as well as many other users at the Lab) who have not and will not be able to cover their shift allocation
- Presently, there are no indications of how and when the situation may change
- **Currently in place:**
  - give full exemption from shifts to both ITEP and MSU becoming effective from last shift allocation until further notice
  - increase by 50% their Service Work requirement (from 0.25 FTE/person to 0.375 FTE/person) as a compensation
- **Further actions:**
  - Statement on the impact of these restrictions on the Collaboration
  - Will work with Lab management to communicate it to DOE

# Service Work for 2019 and beyond

- List of service work task in support of CLAS12 operation:
  - Software
  - Calibration
  - Hardware
  - Data taking and Run Group support
- Contact person defined for each task to provide all the necessary information, supervision, and final assessment
- Starting from 2019, institutions are strongly recommended to select 50% of their service work from the CLAS12 Task List
- Most tasks assigned in 2019 SoS

<https://www.jlab.org/Hall-B/shifts/index.php?display=admin&task=clas12tasks>

Subsystem	Task	Description	Category	FTE/year	Contact(s)	Due date	Recurrence	Responsible	Action to perform
BAND	Calibration	BAND calibration for 2019 <b>Expertise required:</b>	Software	0.200	Lawrence Weinstein	Dec 31, 2019	1 year	(Florian Hauenstein) since October 19, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
BAND	Calibration	BAND calibration code development and maintenance for 2019 <b>Expertise required:</b> JAVA	Software	0.200	Lawrence Weinstein	Dec 31, 2019	1 year	(Florian Hauenstein) since October 19, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CND	Calibration	CND calibrator for RG-B <b>Expertise required:</b> None	Software	0.200	Silvia Niccolai	Oct 12, 2019	1 year	GLASGOW (Daria Sokhan) since October 25, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CND	Calibration	Code developer <b>Expertise required:</b> Java	Software	0.100	Silvia Niccolai	Oct 16, 2019	1 year	(Pierre Chatagnon) since October 16, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CTOF	Calibration	CTOF calibrator for RG-A and RG-K <b>Expertise required:</b> None	Software	0.200	Daniel Carman	Oct 12, 2019	1 year	(Chan Kim) since October 16, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CTOF	Calibration	CTOF calibrator for RG-B <b>Expertise required:</b> None	Software	0.200	Daniel Carman	Oct 12, 2019	1 year	(Achyut Khanal) since October 16, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CTOF	Calibration	Code Developer <b>Expertise required:</b> Java	Software	0.100	Daniel Carman	Oct 16, 2019	1 year	(Louise Clark) since October 16, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CVT	Alignment	Development of CVT alignment procedure and test on 2019 data <b>Expertise required:</b> JAVA	Software	0.200	Yuri Gotra	Dec 31, 2019	1 year	(Gerard Gilroye) since October 19, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>
CVT	Alignment	Development of CVT alignment procedure and test on 2019 data <b>Expertise required:</b> JAVA	Software	0.200	Yuri Gotra	Dec 31, 2019	1 year	(Maxime Dufrene) since October 19, 2018	<a href="#">Edit</a> or <a href="#">DELETE</a>

# Software in the CLAS Collaboration

## At the November meeting:

- Ad-Hoc Committee composed by D. Ireland (Chair), D. Heddle and S. Kuhn charged to discuss the role of the Software Group in the Collaboration and the possibility of electing a Software Coordinator:
  - Software Coordinator should be created as a role within the CLAS Coordinating Committee (CCC)
  - A Software Working Group (SWG) should be constituted on the same level as the current three physics working groups
  - The Software Coordinator will be the chair of the SWG
  - All CLAS collaborators may be associated with this new group by opting in
- *Ad-Hoc Committee charged to elaborate a proposal on how to integrate these changes in the charter*
- Text available at: [https://www.jlab.org/Hall-B/secure/claschair/software/swg\\_change](https://www.jlab.org/Hall-B/secure/claschair/software/swg_change)

## At this meeting:

- Text of charter change made available
- Discussion on proposed text and software coordinator election process on Friday:
  - Should the Software Coordinator be elected by the whole Collaboration or by the Software Group members?
- If endorsed, vote at the following meeting
- If change approved, proceed with the election in the summer to make the Software Coordinator take the position on September 1st

# Authorship of CLAS12 papers

- First discussion on possible revision of rules on author list composition for CLAS12 papers at November meeting:
  - Leading author or pure alphabetical order
- Leading authors + collaboration list has been effective in highlighting the main analysis contributors ...  
...but:
  - List of leading authors has been progressively increasing
  - Having leading authors implies analysis contributions are more relevant than experiment and operation support
  - Many collaboration, including medium energy physics, use alphabetical order
- Discussion will continue on Friday. Based on CCC proposal:
  - Leading author list with limit on maximum number
  - Alphabetical order

# The CLAS Collaboration in brief

- One page information document on the CLAS Collaboration to help new members becoming familiar with the Collaboration structure, rules and procedures
- Not intended to substitute the Charter or Bylaws but only to provide a quick reference to the relevant information and links
- [https://wiki.jlab.org/clas\\_chair/images/d/d7/CLAS\\_Collaboration\\_in\\_brief.pdf](https://wiki.jlab.org/clas_chair/images/d/d7/CLAS_Collaboration_in_brief.pdf)

## Welcome to the CLAS Collaboration



The CLAS Collaboration is the body that manages the CLAS and CLAS12 experiments at Jefferson Lab. The structure and rules of the Collaboration are described in the [CLAS Collaboration Charter](#) and [Bylaws](#). In these documents you will find a description of your rights and duties as member of the Collaboration, the bodies that constitute the Collaboration structure and the procedures that regulate activities in the Collaboration. The present document is not intended to substitute the Charter or Bylaws but only to provide a quick reference to the relevant information and links.

### Collaboration bodies

The Collaboration structure includes the following administrative bodies:

- the [CLAS Coordinating Committee](#): the governance body of the Collaboration, formed by the Collaboration Spokesperson, the Hall B Leader, the Physics Working Group Chairs;
- the [Membership Committee](#): formed by the representatives of each institution that is member of the Collaboration and in charge of membership business;
- the [CLAS Speaker Committee](#): in charge of monitoring and controlling the dissemination of results via conference talks and proceedings;
- the [Service Work Committee](#): in charge of monitoring and evaluating the service work performed by each institution;

the following scientific bodies:

- the Physics Working Groups:
  - [Deep Processes Working Group](#).
  - [Hadron Spectroscopy Working Group](#).
  - [Nuclear Physics Working Group](#).

and the following technical bodies:

- the Software Group.
- the [Calibration and Commissioning Group](#).

### Mailing lists:

Relevant mailing lists for Collaboration activities include:

- CLAS Collaboration: [clas\\_members@jlab.org](mailto:clas_members@jlab.org)
- Hall B: [hallb@jlab.org](mailto:hallb@jlab.org)
- CLAS offline software and analysis: [clas\\_offline@jlab.org](mailto:clas_offline@jlab.org)
- CLAS12 Software Group: [clas12\\_software@jlab.org](mailto:clas12_software@jlab.org)
- CLAS12 Calibration and Commissioning Group: [clas12\\_calcom@jlab.org](mailto:clas12_calcom@jlab.org)
- Hadron Spectroscopy Working Group: [clas\\_hadron@jlab.org](mailto:clas_hadron@jlab.org)
- Deep Processes Working Group: [deepwg@jlab.org](mailto:deepwg@jlab.org)
- Nuclear Physics Working Group: [nuclear@jlab.org](mailto:nuclear@jlab.org)

Registration to the mailing lists can be requested following the instructions at <https://cc.jlab.org/maillinglists/gettingstarted>. The full list of mailing lists, including CLAS and CLAS12 Run Groups is available at [https://cc.jlab.org/mailman\\_lists\\_index](https://cc.jlab.org/mailman_lists_index). (Note that access to the above links requires the user to login first on the JLab Computer Center page at [cc.jlab.org](https://cc.jlab.org)).



# PAC47

- PAC meeting on July 29 – August 2, 2019
- Considering new proposals and run-group additions
- Parallel-running proposals with no new equipment:
  - The PAC requests the internal review report be submitted with the proposal
  - A collaboration representative will report on parallel running proposals to the PAC
- Jeopardy (will affect CLAS in 2020)
- **The deadline for submission of proposals and updates is 8:00 a.m. EDT (Eastern Daylight Time) on Monday, June 10, 2019**
- CLAS review schedule (**STRICT!**):
  - Abstracts for all new proposals due to CLAS chair: April 14
  - Full proposal due to CLAS reviewers: April 30
  - Response by review committee: May 14
  - Final committee recommendation: May 31
  - Submit to Working Group chairs and copy CLAS chair
- Details at:
  - [https://www.jlab.org/exp\\_prog/PACpage/](https://www.jlab.org/exp_prog/PACpage/)

# Chair election

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- Election for new Chair at the June meeting (06/18-21)
- According to the Charter:
  - *Management – E: At least 60 days prior to the election of a new Chairperson of the Coordinating Committee, this Committee will appoint two or more other collaboration members with the charge of searching for suitable candidates. It will notify the members of the Collaboration of the list of nominees at least 30 days before the election*
- Nominating committee appointed by April 14
- List of nominees by May 18

# New CLAS papers

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- 4 new publications since last Collaboration Meeting
- 4 submitted to the journal
- 3 in Collaboration-wide review

# Papers published since November

Paper ID	Paper Title	Lead Author	Contact Person	Journal
2018-03	EMC Effect and Correlated Nucleons: When One Plus One is not Two	B. Schmookler	O. Hen	Nature Physics
2018-05	Beam Spin Asymmetry of $ep \rightarrow e\eta$ in the Deep Inelastic Regime	B. Zhao	A. Kim	PLB
2018-07	First results on nucleon resonance photocouplings from the gamma $p \rightarrow p \pi^+ \pi^-$ reaction	E. Golovach	E. Golovach	PLB
2018-10	Study of Cascade* Photoproduction from Threshold to $W = 3.3$ GeV	J. Goetz	K. Hicks	PRL

# Papers in the pipe...

## Submitted to the Journal

Paper ID	Paper Title	Lead Author	Contact Person	Target Journal
2018-11	Direct Observation of Proton-Neutron Short-Range Correlation Dominance in Heavy Nuclei	M. Duer	O. Hen	PRL
2018-12	Toward a Complete Experiment in omega Photoproduction on the Proton: Measurement of the Double-Polarization Observables F,...	P. Roy	V. Crede	PRL
2018-13	Measurement of Nuclear Transparency Ratios for Protons and Neutrons	M. Duer	O. Hen	PRL
2018-14	First exclusive Deeply Virtual Compton Scattering measurement off bound nucleon in $^4\text{He}$	M. Hattawy	M. Hattawy	PRL

## With Ad-Hoc Committee

Paper Title	Lead Author	Contact Person	Run Group
Study of Color Transparency in $p^0$ Electroproduction off Nuclei	L. El Fassi	L. El Fassi	eg2
Exclusive $\pi^0 p$ electroproduction off protons in resonance region at photon virtualities $0.4 < Q^2 < 1 \text{ GeV}^2$	N. Markov	K. Joo	e1f
Exploring the Structure of the Proton via Semi-inclusive Pion Electroproduction	N. Harrison	K. Joo	e1f

# From Jlab User Organization

- We encourage (again, always) the users to register their non-governmental email address to participate to funding advocacy events (e.g. nuclear physics day on the hill, EIC on the Hill). University addresses are ok. For instructions go to the JLab user organization wiki page [https://wiki.jlab.org/cugwiki/index.php/Main\\_Page](https://wiki.jlab.org/cugwiki/index.php/Main_Page). Asking google for "JLab user organization wiki" will get you there. Registration is as simple as using mailman at JLab.
- Users will receive a survey on diversity and inclusion in the summer of 19. Do answer: the board is concerned by possible policies holes with regard to user protections and responsibilities at the lab.
- Food service on-site: food services contract is up, going forward most services likely to change form. What food services should be provided at JLab? Send comments to Brad Sawatzky - user board director in charge.
- Security policies will be tighten (especially for foreign users): e.g. JLIST registration 1 week before coming on site is not a new policy but will be strictly enforced. New policies to start on April 1 (really).
- 12 GeV Jeopardy starting this summer: the board hopes for it to be a constructive process to strengthen the physics program rather than simply an elimination process.
- User organization annual meeting will be on June 24 to 26, 2019. Will Brooks is the main organizer.
- Looking for new members of the board. If interested to run in the elections, contact Krishna Kumar (chair of the nominating committee).

# Meeting Agenda

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- Morning talks dedicated to Hall B, Lab and Accelerator status
- Theory talk and recent Hall B results
- CLAS12 session today and tomorrow
- Software session tomorrow morning
- Physics WG parallel session and Joined session on CLAS12 analysis (discussion on pass1 readiness review and analysis organization)
- Business meeting on Friday morning: discussion on Charter change and authorship rules
- Student and post/doc lunch meeting today
- Membership Committee meeting over lunch break tomorrow
- Software workshop on Friday afternoon
- Reception tonight!