

# Program Advisory Committee Meeting - PAC39

December 1, 2011

PAC39 will be held during the week of June 18, 2012 and will continue the call for new nuclear physics proposals. As in the recent past, the criterion for approval of new proposals will be that the proposal represents "high quality physics that, based on what we know today, is highly likely to be of sufficient scientific merit that it will be included in the top half of the priority list to be established for the first 5 years of 12 GeV operations." *The deadline for submission of proposals and updates is close of business on Friday, May 4, 2012.*

*Proposals and updates for PAC39 should be submitted electronically using the instructions at [http://www.jlab.org/exp\\_prog/PACpage/instructions.html](http://www.jlab.org/exp_prog/PACpage/instructions.html)*

## New Proposals

Detailed information on the process for proposal submission is available at [http://www.jlab.org/exp\\_prog/PACpage/guidelines.html](http://www.jlab.org/exp_prog/PACpage/guidelines.html). New proposals will be granted a 20 minute presentation in a public session at the PAC meeting. Following the public presentation session the PAC will continue its discussions in closed session, and at least one spokesperson should be available either in person or by phone for 24 hours after the public session to answer questions as the PAC's discussion progresses. Proposals will, if approved, be given a scientific rating and a beamtime allocation.

## Conditionally Approved Proposals

The PAC may conditionally approve proposals when additional requirements must be fulfilled before full approval is granted. There are two categories of conditional approval:

- C2 – must return to the PAC to address concerns or issues to obtain approval,
- C1 – must meet designated technical requirements to obtain approval from laboratory management – further PAC review is not required.

The rule for newly conditionally approved 12 GeV proposals is that they must return for approval at one of the next 2 consecutive PAC meetings following the PAC at which they received the conditional approval status.

Proposals that received C2 status at a previous PAC may return to PAC39 to be considered for approval. Proposals with previous conditional approval (C2) that wish to be considered for approval at PAC39 should submit an updated proposal and will be granted a 20-minute presentation at the PAC meeting. Following the public presentation session the PAC will continue its discussions in closed session, and at least one spokesperson should be available either in person or by phone for 24 hours after the public session to answer questions as the

PAC's discussion progresses. If approved, the proposals will be considered for rating along with the other approved proposals in the grading session.

## **Prioritization**

As the backlog of experiments is now quite substantial and there are several years before the experimental program is underway, we anticipate a need to discuss the process for establishing priorities in the future. PAC39 will begin a discussion of the process for re-establishing priorities of approved experiments on a timely basis.

### **Prioritization of Run Groups**

There are a large number of experiments (currently only in Hall B) that have been organized into "run groups". Run groups include multiple experiments that can take data simultaneously on different and/or related physics using the same detector, target, and beam conditions. In addition to the individual experiment ratings reviews discussed above for the experiments within the run groups, we will carry out a review of the run groups themselves to establish their overall scientific priority. This will be done in a PAC session roughly one year before CLAS12 starts taking data. If similar situations evolve in the other halls we will do a similar "overall scientific priority" assignment to the run groups that evolve there.

## **PAC Results**

The results of the PAC's deliberations will become public as follows: the list of scientific ratings and beam time allocations will be provided to the Hall Leaders at the PAC closeout and then posted on the PAC39 website within 24 hours. The final written PAC report will be posted on the PAC39 website and the user community notified by email as usual.

### **Appendix: Scientific Categories for Nuclear Physics Proposals**

1. **The Hadron spectra as probes of QCD**  
(GlueX and heavy baryon and meson spectroscopy)
2. **The transverse structure of the hadrons**  
(Elastic and transition Form Factors)
3. **The longitudinal structure of the hadrons**  
(Unpolarized and polarized parton distribution functions)
4. **The 3D structure of the hadrons**  
(Generalized Parton Distributions and Transverse Momentum Distributions)
5. **Hadrons and cold nuclear matter** (Medium modification of the nucleons, quark hadronization, N-N correlations, hypernuclear spectroscopy, few-body experiments)
6. **Low-energy tests of the Standard Model and Fundamental Symmetries**  
(MOLLER, PVDIS, PRIMEX, .....)