PAC 51 Closeout

Note: PAC report should be available around mid-August.

Markus Diehl
28 July 2023

Results: Proposals

NUMBER	TITLE	CONTACT PERSON	HALL	DAYS REQUESTED	DAYS AWARDED	SCIENTIFIC RATING	PAC DECISION
New Proposals							
PR12-23-001	Measurement of the Generalized Polarizabilities of the Proton in Virtual Compton Scattering	Nikos Sparveris	C	62	62	A-	Approved
PR12+23-002	Beam Charge Asymmetries for Deeply Virtual Compton Scattering on the Proton at CLAS12	Eric Voutier	B	100	100	A-	C1
PR12+23-003	Measurement of Deep Inelastic Scattering from Nuclei with Electron and Positron Beams to Constrain the Impact of Coulomb Corrections in DIS	Dave Gaskell	C	9.3	9.3	A-	C1
PR12-23-004	A Search for a Nonzero Strange Form Factor of the Proton at 2.5 (GeV/c)^2	Bogdan Wojtsekhowski	C	45	45	A-	Approved
PR12+23-005	A Dark Photon Search with a JLab positron beam	Bogdan Wojtsekhowski	B	60			Deferred
PR12+23-006	Deeply Virtual Compton Scattering using a positron beam in Hall C	Carlos Munoz Camacho	C	137	137	A-	C1
PR12-23-007	A Measurement of the Proton g2 Structure Function at Intermediate Q2	David Ruth	C	33			Deferred
PR12+23-008	A Direct Measurement of Hard Two-Photon Exchange with Electrons and Positrons at CLAS12	Axel Schmidt	B	55	55	A	C1
PR12-23-009	Nuclear Charm Production and Short-Range Correlations in Hall D	Or Hen	D	100			C2

Results: Proposals

NUMBER	TITLE	CONTACT PERSON	HALL	DAYS REQUESTED	DAYS AWARDED	SCIENTIFIC RATING	PAC DECISION
New Proposals (cont'd)							
PR12-23-010	Color Transparency in Maximal Rescattering Kinematics	Holly Szumila-Vance	C	95	40	B+	Approved
PR12-23-011	Precision Deuteron Charge Radius Measurement with Elastic Electron-Deuteron Scattering	Dipangkar Dutta	B	40			Deferred
PR12+23-012	A measurement of two-photon exchange in unpolarized elastic positron–proton and electron–proton scattering	Michael Nycz	C	56	56	A-	C1
PR12-23-013	Measuring Short-Range Correlations with ALERT	Florian Hauenstein	B	17	17	A	Approved
PR12-23-014	Measurements of the Ratio R = sigmaL/sigmaT, p/d ratios, Pt dependence, and azimuthal asymmetries in Semi-Inclusive DIS pi0 production form proton and deuteron targets using the NPS in Hall C	Peter Bosted	C	7	7	A-	Approved

- 6 proposals on experiments with positron beams, covering a broad area of physics
- the committee welcomes the guidance on likely beam parameters provided by the Positron Working Group

Jeopardy

- Several experiments have asked for a substantial increase of their awarded beam time.
- The committee felt that the format of a Jeopardy review (update document, one reader, 20’ presentation) does not provide a sound basis for approving such substantial changes.

  Additional beam time can be requested in a separate proposal, which will permit a full and detailed PAC review.
- We have not increased the awarded beamtime for any of the experiments reviewed at this PAC.
- We engourage the Lab management and User Organization to consider this issue and to revise the Jeopardy rules accordingly.

Results: Jeopardy

NUMBER	TITLE	CONTACT PERSON	HALL	DAYS REQUESTED	DAYS AWARDED	PAC DECISION
Jeopardy						
C12-15-006	Measurement of Tagged Deep Inelastic Scattering	Dipangkar Dutta	A,C	60	27	Remain active with C1 status
E12-13-011	The Deuteron Tensor Structure Function b1	Karl Slifer	C	47.4	41	Remain active
E12-14-002	Precision Measurements and Studies of a Possible Nuclear Dependence of R	William Henry	C	22	22	Change rating from B to A-
E12-15-005	Measurements of the Quasi-Elastic and Elastic Deuteron Tensor Asymmetries	Elena Long	C	52.8	45	Remain active
E12-15-008	An isospin dependence study of the Lambda-N interaction through the high precision spectroscopy of Lambda hypernuclei with electron beam	Satoshi N. Nakamura	C	61	28	Remain active
E12-16-001	Dark Matter search in a Beam Dump eXperiment (BDX)	Marco Battaglieri	A	n/a	n/a	Remain active
E12-17-008	Polarization Observables in Wide-Angle Compton Scattering at large s, t and u	David Hamilton	C	46	46	Remain active

Run group addition

- E12-16-010C
  Hall B, run group K
  Separation of the σ_L and σ_T contributions to the production of hadrons in electroproduction

Endorsed

Letters of Intent

- 16 LOIs received, 5 of them for positron beams
  - too many to review in detail during this closeout
- received letters with very different levels of maturity
  - only limited feedback can be given to letters that provide only few details
    the PAC cannot fill in missing details by itself
- we recommend not to rush towards submission of a full proposal
  - prefer a mature proposal in 2 years to a premature one next year

Some requests to proposal and LOI writers

- double check equations and units
  (where ‘typos’ can seriously confuse your readers)
  and provide references for equations where appropriate
- provide proper references to experiments (double check experiment numbers) and to their publications
  associate journal references with the experiment number, as this is often hard to find (or missing) in the journal articles
- make proposals and LOIs self-contained
  when needed, an appendix taken from an article is better than having your reader need to dig in the literature
- but be concise and focused
  a targeted introduction is better than a general review

this will allow your readers to focus on your proposed experiment, and not lose time searching for relevant information

Thanks to

- all spokespersons and collaborations
- all PAC reviewers,
  Marco Contalbrigo (JLUO Chair) and Yordanka Ilieva (JLUO Chair-elect)
  special thanks to Alessandro Bacchetta for agreeing to serve for a 6th time
- JLab management and scientists
  especially Thia Keppel, Douglas Higinbotham, Patrizia Rossi, Bob McKeown,
  and all those who provided the TAC physics and theory reports
- Pamela Cole, Stephanie Tysor, Lorelei Carlson, and the technical staff

Stay safe. Hope to see you again next year.