

JSA Initiatives Fund Proposal Summary Sheet

Proposal title: **Workshop Support for the Development of a Large Acceptance Spectrometer for PVDIS Studies with a 11 GeV Beam**

New proposal Renewal Total funds requested **\$ 20,000** Leveraged support / Matching resources Yes No

If your proposal includes leveraged support or anticipates matching resources, identify source, amount, and secure the signature of an authorized representative of the source.

Source/Amt	Authorized Signature:
Source/Amt	Authorized Signature:
Source/Amt	Authorized Signature:

Principal Investigator (PI) (PI) Paul Souder, (Co-PI) Kees de Jager

<input type="checkbox"/> JLab employee	Associate Director signature	
<input checked="" type="checkbox"/> JLab user	Name of university	<u>Syracuse University</u>
<input type="checkbox"/> Other	Name of institution	
PI's Mailing Address	<u>Department of Physics, Syracuse University, Syracuse, NY 13244</u>	
PI's Telephone / E-Mail	<u>315-443-9102 / souder@physics.syr.edu</u>	
Co-PI's (with affiliation)	<u>Kees de Jager / Jefferson Laboratory / 757-269-5240 / kees@jlab.org</u>	

Executive summary including the projected begin/end dates.
 Beginning date: 1/15/09, End date on or about 4/1/10.

With its higher energy, JLab will be able to explore the physics of deep inelastic scattering (DIS), especially in the kinematic range of large Bjorken x. The measurement of parity-violating asymmetries is a particular powerful tool for exploring this physics. However, large rates are needed for parity experiments at the appropriate kinematics, and a new large acceptance spectrometer will have to be designed and built in order to exploit this opportunity. The NSAC long range plan supported this concept. A group of us, who are involved in the 6 GeV parity-violation program, is working towards the submission of a scientific proposal in January 2009 to the JLab PAC.

Synopsis of scientific, educational, technical, and/or business merits, and alignment with and significance to Lab's current programs. The goal is to develop the scientific, technical and international collaboration necessary to support an effort to achieve approval, funding and eventually conduct a broad program of parity-violation measurements in the 12 GeV era of JLab, see attachment. We are requesting funding for two workshops, one on theoretical issues and one on experimental issues, as well as for three technical meetings focused on specific subsystems required for the program. These meetings will be critical for making preparations for a full technical review. This would greatly enhance the project's ability to then secure independent funding for the construction and operation of the apparatus.

Proposed evaluation plan to measure success. If this is a request for renewal of funds, assessment of prior year performance.

The success of this effort will ultimately be demonstrated by achieving full approval for and funding of the proposed scientific project and the caliber of the external collaborators and institutions we can attract.

Authorized signature for proposal from:

JLab employee	Lab Director signature	
JLab user	JLab Users Group Board Chair	<u>Ronald Gilman</u>
Other	Institutional authorization	

Office of SURA Chief of Strategic Services – Internal Use

Proposal received:	Submitted for review:	Disposition:
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Attachment A Technical Proposal – no more than 5 pages please. Up to 5 additional pages of letters of support, or other supporting materials may accompany proposal.
 Attachment B Budget Proposal