**Hall B Group Leader**

Jefferson Lab, located in Newport News, Virginia, USA, is a world-class scientific laboratory managed for the U. S. Department of Energy by Jefferson Science Associates, LLC. Its core is the Continuous Electron Beam Accelerator Facility (CEBAF). To expand the opportunity for discovery and addressing important topics in hadronic, nuclear, and electroweak physics, Jefferson Lab has completed in September 2017 an upgrade of its facility by doubling the energy of the electron beam from 6 GeV to 12 GeV, constructing a new experimental hall (D) and upgrading its existing experimental halls A, B, C.

Jefferson Lab is seeking an outstanding person to take on the leadership of Hall B. The successful candidate, as Hall B Group Leader, will provide scientific leadership to the diverse hall staff and users leading to the successful execution of their scientific program and timely publication of results.

The Hall B physics program covers a broad range of topics, with as central focus three-dimensional imaging of the quark structure of the nucleon, a flagship of the Jefferson Lab 12 GeV scientific program. Other topics include measurements of the spectrum and structure of hadronic excited states, the search for Heavy Photons, and the characterization of nucleon-nucleon correlations in matter.

The CLAS12 detector, a modern large acceptance spectrometer designed to withstand high luminosity operation with electron beams, up to 1035/cm-2s-1, will be used to execute this program. The spectrometer allows the full reconstruction and characterization of nuclear reactions with multiple particles in the final state and is instrumented with specialized tracking and particle identification systems, some on the cutting edge of technology. The high luminosity operation and data acquisition rate result in huge volumes of collected data (multi petabytes per year) which pose software organization, computing architecture and data management challenges.

The Hall B Group Leader is responsible for the staging and execution of the scientific experiments. He/she is also responsible for the further development of the research program through collaboration with users, staff, and advisory committees. The responsibilities also include management of all Hall scientific, postdoctoral, engineering and technical staff, budgeting, planning and resource allocation. The successful candidate will provide coordination, leadership and communication with the Hall B user community, and organization of technical and human resources towards expedient science publication.

*Position Requirements*

The successful candidate will be an internationally recognized expert in the forefront of nuclear/particle physics. A record of scientific excellence as demonstrated by extensive publication in nuclear/particle physics is required. A Ph.D. in Experimental Nuclear or Particle Physics or the equivalent combination of education, experience, and specific training is required. The candidate must possess extensive professional experience in intermediate energy nuclear/particle physics or a closely related area, of which a minimum of three years is in management of an internationally recognized physics research group. The candidate should have technical experience with a broad variety of experimental equipment such as large-scale detectors, high rate data acquisition and trigger systems, and offline software for charged particle tracking and detector simulations. Demonstrated supervisory, planning, problem solving, decision making and communication skills are required. Experience in managing experiments with comparable data volumes and understanding of modern computing infrastructure, parallel computing and exploiting grid or cloud-based computing are desirable.

*Mental Requirements*

• Ability to comprehend, formulate, and communicate highly abstract concepts

• Ability to express or exchange complex ideas by means of spoken and written communication

• Ability to analyze and interpret complex data and develop models

*Physical Requirements*

• Ability to get across various locations on the laboratory site and access work areas

• Ability to work on a computer for extended periods

• Visual capabilities sufficient to use computer workstations, read documents, and see safety alarms

• Auditory capabilities to hear safety alarms

Jefferson Science Associates, LLC (JSA) manages and operates the Thomas Jefferson National Accelerator Facility (Jefferson Lab). JSA/Jefferson Lab is an Equal Opportunity Employer and does not discriminate in hiring or employment on the basis of race, color, religion, ethnicity, sex, sexual orientation, gender identity, national origin, ancestry, age, disability, or veteran status or on any other basis prohibited by federal, state, or local law. As part of the Lab's equal employment opportunity policy, we also take affirmative action as called for by applicable laws and Executive Orders to ensure that minority group individuals, females, disabled veterans, recently separated veterans, other protected veterans, Armed Forces, and qualified disabled persons are introduced into our workforce and considered for promotional opportunities.