2014 ATLAS User's Meeting: May 15-16, 2014

Dear Colleagues,

The ATLAS accelerator complex at Argonne National Laboratory is restarting operation after an extended shutdown to complete its intensity and efficiency upgrade. This upgrade project consisted of a reconfigured injection line and a positive-ion injector that now includes a high-intensity CW RFQ for initial acceleration. In addition, a major reconfiguration of the booster section was also part of the project. A new cryostat with state-of-the-art cavities has been installed and a number of older cavities were consolidated. These modifications, together with additional changes to the beam transport, result in a rejuvenated ATLAS facility capable of handling much higher beam intensities. Operation of the low-energy section of the accelerator, including the new RFQ and the positive ion injector, restarted in mid-January. It has been providing beams to PAC-approved low-energy irradiation experiments, in addition to beam studies that have demonstrated stable operation with heavy-ion currents up to 7 pμA, far exceeding the previous performance of the accelerator. Successful operation of the new ATLAS Booster section, including the new upgrade cryostat, has now also been demonstrated with the acceleration of a ^{20}Ne beam to 6 MeV/u. In addition, a new 1.7 Ci Californium source is being installed at CARIBU. This source should greatly improve the extracted yields for neutron-rich exotic beams. Tests of the modified radiation interlock system will be completed in the next two weeks and full operation of ATLAS/CARIBU as a User facility is expected to restart in early March.

The ATLAS facility made available to the Users after this upgrade will have significantly improved capabilities. As a result, it is expected that the research program will evolve to take full advantage of new physics opportunities with a suitable suite of experimental equipment. Significant work has already gone into improvements of existing experimental systems (e.g.; digital Gammasphere, new HELIOS detectors) and into developing new equipment (AGFA, AIRIS) through fruitful collaborations between Users and in-house staff. However, at this point, it is important to gather further input from the ATLAS User community. To this end, the Executive Committee of the ATLAS Users group and ATLAS management are planning a User Meeting to take place at ANL on May 15-16, 2014. The meeting will focus on delineating the goals of the physics program for the next decade, and on defining the experimental equipment required to meet these objectives. An updated strategic plan for ATLAS will be developed as a result.

Information on the two-day meeting will be posted soon at http://www.phy.anl.gov/atlas/workshop14/, together with a preliminary program and registration forms. The meeting will be mostly devoted to discussions on the path forward for the main physics programs at ATLAS and on the required experimental equipment. Groups or individuals are encouraged to bring forward new initiatives (physics and experimental equipment) and, to this end, are encouraged to contact the meeting organizers (savard@anl.gov) as soon as possible so that the required discussion time can be incorporated early on in the program.

We look forward to seeing you at ANL in May.

Alan Wuosmaa, Chair of the ATLAS Users Executive Committee
Guy Savard, Scientific Director of ATLAS