



First Circular of the ALTO nu-ball hybrid spectrometer workshop 2016

We are pleased to invite you to a workshop to be held at IPN Orsay on 19th and 20th of May 2016 dedicated to the physics to be addressed by *nu-ball*, a high-efficiency hybrid Ge-LaBr₃ gamma-ray array. This array should be installed at the ALTO facility in 2017 and will consist of 24 clover detectors and up to 36 LaBr₃ detectors from the FATIMA collaboration with the goal of achieving a combined photopeak efficiency of around 10%.

The array, coupled to the wide range of beams available at the ALTO facility and combined to a number of ancillary devices, will provide some unique physics opportunities.

The workshop is intended to discuss potential physics ideas for experiments using *nu-ball* at ALTO and will focus on several scientific themes related to the unique combination of detectors and available beams, including:

- Coupling with the LICORNE directional fast neutron source to produce and study exotic nuclei
- Fast-timing studies using the unique capabilities of LaBr₃ and pulsed (nanosecond) tandem beams
- Coupling with the Orsay Universal Plunger System (OUPS) for simultaneous complimentary lifetime measurements
- Coupling with the CORSET fission fragment detector for reaction mechanism studies or any other particle detectors that could be made available for experiments at ALTO

The scientific program will include invited and contributing talks. The deadline for abstract submission is the 16^{th} of April. The authors of the selected presentations will be informed by 2^{nd} of May. Registration and abstract submission for the workshop is now possible at the web site: <u>https://indico.in2p3.fr/event/12783/</u>

Physics ideas, pre-proposals and letters of intent for physics with *nu-ball* will be especially welcome. A call for proposals for the ALTO PAC (chaired by Rick Casten), focusing specifically for experiments with the *nu-ball* array, will be announced in late 2016. The selection of the experiments by the ALTO PAC meeting in early 2017 should provide sufficient time for the preparation of the experiments to be performed later in 2017 – 2018.

A workshop dinner is foreseen for the evening of 19th May. We look forward to seeing you in May in Orsay.

Best Regards,

Jon Wilson, on behalf of the Local Organizing Committee

International Scientific Committee & Local Organizing Committee Members

Luis Fraile (Madrid, Spain), Georgi Georgiev (CSNSM, France), Paul Greenlees (Jyvaskyla, Finland), Andreas Görgen (OCL, Norway), Wolfram Korten (CEA Saclay, France), Matthieu Lebois (IPNO, France), Silvia Lenzi (INFN Padova, Italy), Araceli Lopez-Martens (CSNSM, France), Adam Maj (IFJ Krakow, Poland), Iolanda Matea (IPNO, France), Nicu Marginean (Bucharest, Romania), Stephan Oberstedt (IRMM, Belgium), Patrick Regan (Surrey, UK), Peter Reiter (Cologne, Germany), John Simpson (Daresbury, UK), Jon Wilson (IPNO, France)