**Call for Pre-proposals for IDATEN**

The IDATEN (International Detector Assembly for fast-Timing measurements of Exotic Nuclei) collaboration has been launched at the RI Beam Factory (RIBF) in the RIKEN Nishina Center (RNC). We herein solicit pre-proposals for nuclear-physics experiments at RIBF with the use of the IDATEN experimental setup.

This project has been realized thanks to the collaboration with FATIMA (FAst TIMing Array) in UK and KHALA (Korea High-resolution Array of LABr3(Ce)) in South Korea. The main body of the IDATEN detector assembly consists of 84 units of cerium-doped lanthanum bromide: LaBr3(Ce) scintillators arising from a combination of 36 FATIMA-type detectors (Φ1.5”×2”-length crystal each) and 48 KHALA-type detectors (Φ1.5”×1.5”-length crystal each). With this detector configuration, γ-ray full-energy-peak efficiencies of about 20, 9, and 5 % are expected for 100-, 500-, and 1000-keV γ rays, respectively. In addition to the LaBr3(Ce) detectors, two Clover-type HPGe detectors will be installed to monitor γ-ray energy spectra with high resolution and to disentangle complex decay spectra by gating on a specific γ ray measured in coincidence with the LaBr3(Ce) detectors. These γ-ray detectors will be arranged around a modified version of the WAS3ABi (Wide-range Active Silicon-Strip Stopper Array for Beta and ion detection) active stopper system, which comprises several layers of double-sided silicon-strip detectors and fast-timing plastic scintillator detectors in a close-packed geometry, at the end of the BigRIPS-ZeroDegree spectrometer (F11). The new IDATEN array has a capability to measure the lifetimes of excited states in the picosecond range by means of electronic fast-timing β-γ and γ-γ coincidence methods. For more details about the IDATEN project, please refer to the construction proposal embedded below.



The purpose of collecting pre-proposals is to confirm the feasibility of the proposed experiments and to coordinate submission of real proposals to the forthcoming PAC meeting at RIBF so that overlaps between proposals can be avoided. Those who are interested in conducting an experiment as part of the IDATEN collaboration are required to send a pre-proposal via Google Forms (<https://forms.gle/1M23mJCKhRHBRaeX9>) by **May 31 in 2022**. All the proponents are invited to the collaboration workshop, which will be held from **July 6 to 8**, to present the contents of the pre-proposal. In the workshop, we will also discuss how to organize research groups for each of the real proposals based on the physics interest and common setting of the primary/secondary beams. Due to the still uncertain situation on the pandemic, a video link via Zoom will be prepared for the workshop participants. Detailed information about the dedicated workshop will be carried later.

We are looking forward to your contribution to the IDATEN project.

With best regards,

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