Plan for nuclear physics experiments using rare isotope beams at RAON

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New rare isotope beam (RIB) accelerator complex RAON will be constructed in South Korea for basic sciences and various applications. RAON is expected to provide high-intensity RIB using ISOL (Isotope Separator On-Line) as well as IF (In-flight Fragmentation) techniques. In order to study the forefront nuclear physics using RIB at RAON, the Recoil Spectrometer KOBRA and the Large-Acceptance Multipurpose Spectrometer LAMPS are being designed. The KOBRA will investigate the origin of elements, the limit of nuclear stability, and the modification of the nuclear shell structure precisely. On the other hand, the LAMPS will investigate primarily the nuclear equation of state and the symmetry energy, which are critical for the astrophysical objects such as supernovae and neutron stars. In this presentation, we will overview the planned nuclear physics program at RAON.