RCNP SEMINAR

Title The study of fundamental interactions and

symmetries with radioactive isotope

Speaker Prof. H.W. Wilschut

(Kernfysisch Versneller Instituut, University of Groningen)

Time&Date March 2nd (Tue), 15:00-

Place Lecture room, 4th floor, RCNP, Osaka University

Abstract

We have recently completed the experimental facilities for the $TRI\mu P$ program. The acronym stands for Trapped Radioactive Isotopes, micro(μ)laboratories for fundamental Physics. In the study of fundamental symmetries and interactions, radioactive isotopes can play an important role as a result of their specific atomic and nuclear properties. We discuss the experimental facilities with emphasis on the production of alkali and alkaline-earth elements and the use of atomic and ion traps and results obtained so far in the preparation of experiments measuring time-reversal violation and atomic parity violation.