

Abstract Submitted
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RICH counter for heavy-ion particle identification using multi-anode photomultipliers SHINTARO YAMAOKA, MITSUNORI FUKUDA, YUSUKE MORITA, RYOSUKE KANBE, KENSAKU MATSUTA, MOTOTSUGU MIHARA, JUNICHI OHNO, YASUTO KAMISHO, MASAOMI TANAKA, Dept. Physics, Osaka University, DAIKI NISHIMURA, KENTA YOSHINAGA, Dept. Physics, Tokyo University of Science, TAKASHI OHTSUBO, MAYA TAKECHI, MASAYUKI NAGASHIMA, Dept. Physics, Niigata University, TAKUJI IZUMIKAWA, Radioisotope Center, Niigata University, ATSUSHI KITAGAWA, SHIGEKAZU FUKUDA, SHINJI SATO, SHINJI SUZUKI, National Institute of Radiological Science, TAKESHI SUZUKI, TAKAYUKI YAMAGUCHI, Dept. Physics, Saitama University, HIMAC H093 COLLABORATION — In order to develop a new RICH counter (Ring Imaging Cherenkov counter) for heavy-ion particle identification, we have constructed a test system for measurement of a ring image of Cherenkov light using multi-anode photomultipliers that detect a photon incident position. For a test, a $^{58}\text{Ni}(480\text{MeV}/u)$ beam provided by the HIMAC heavy-ion synchrotron was used. As radiators, we have tested synthetic silica, polycarbonate, and BK7. We have selected a wavelength of Cherenkov light by using a band pass filter. As a result, the ring image of Cherenkov light was observed and the obtained resolution of velocity will be reported at the meeting.

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