

MODELING OF A POSITION-SENSITIVE RESONANT Schottky CAVITY PROTOTYPE FOR THE Rare-Ring AT RIBF/RIKEN

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Schottky cavity pick-ups have proven to be fast and sensitive detectors for use in storage ring experiments with radioactive ion beams (RIB) relevant for nuclear astrophysics [1]. Cavity pick-ups with longitudinal sensitivity have been successfully used in the storage ring ESR in GSI facility [2-4], CSRe in Lanzhou [5] and in R3 ring in RIKEN [6]. Some initial studies were carried out in order to extend the concept to sensitivity in transverse direction for use in different storage rings [8-10]. In the current work we report on the progress of the modelling of a prototype of a position-sensitive resonant Schottky cavity for the R3 storage ring in the RIKEN facility.

References

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