ID contributo: **19** Tipo: **non specificato**

Update on the coupling between the In-Flight Radioactive Ion Beam Facility EXOTIC and AGATA

venerdì 21 giugno 2024 16:00 (20 minuti)

During the past year, the EXOTIC facility underwent several upgrades, including the installation of newly developed Micro-Channel Plates (MCPs). This enables the event-by-event identification of the radioactive ion beam by the two detectors positioned upstream of the AGATA target chamber. The present setup facilitates the tracking of incoming particles, thereby enabling the separation of the desired secondary beam from contaminants.

In October 2023, a 2-day run successfully tested the re-operation of the facility, encompassing primary beam focusing and monitoring, performance evaluation of the new software for remote control of magnetic fields and slits, as well as secondary beam selectivity and purification.

Subsequently, off-line testing of the first MCP with α sources confirmed the expected functionality of the detector. During the development of the second MCP, successful off-line testing of the tracking system for the coupled system MCP+DSSSD (32 strips $\times$32 strips) was also performed.

We will report on the preliminary results obtained from the offline tests of the two micro-channel plates, including estimated efficiencies, time-of-flight, and position resolutions. Additionally, the capabilities of the newly constructed position-tracking system will be discussed.

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Classifica Sessioni: On-going R&D Detectors