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Type: **Invited Talk**

## Physics results with the ultimate AGATA-MUGAST-VAMOS setup and ISOL beams at GANIL

*Wednesday, 29 November 2023 11:40 (25 minutes)*

The AGATA-MUGAST-VAMOS set-up, which was recently available at GANIL for a direct reaction campaign, combined the state-of-the-art gamma-ray tracking array AGATA with the highly-segmented silicon array MUGAST and the large-acceptance magnetic spectrometer VAMOS. The mechanical and electronics integration provided a maximum efficiency for each device. The superb sensitivity of the complete set-up offered a unique opportunity to perform exclusive measurements of direct reactions with radioactive beams delivered by the SPIRAL1 facility at GANIL, France.

An experimental campaign using radioactive ISOL beams was performed during 2019-2021 using the cutting-edge combined setup, covering physics cases ranging from oxygen-14 to argon-46, and topics from nuclear structure and dynamics to astrophysics.

In this contribution I'll review the performance of the setup and focus on high-impact physics results of the experimental campaign.

### Attendance Type

In-person

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