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## Reaction and structure studies with the MUGAST+AGATA setup at VAMOS

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New-generation silicon arrays with high granularity, such as GASPARD and TRACE, have been natively designed for optimal integration in state-of-the-art  $\gamma$ -ray spectrometer like AGATA to perform high-resolution reaction studies. Such coupling allows a considerable gain in excitation-energy resolution compared to recoil charged-particle detection only and thus opens unique opportunities to study intermediate-mass exotic nuclei with a large density of excited states.

While these Si arrays are being developed in collaboration, a project of “intermediate” configuration (named “MUGAST” for MUST2-GASPARD-TRACE) has been proposed in 2015 to perform reaction studies in combination with AGATA- $1\pi$  at VAMOS. This configuration provides a large angular coverage that allows the study of stripping reaction such as (d,p), (3He,d), (3He,p), (6Li,d), .... requiring detection of the recoil particle at very backward angles to 90 degrees or lower.

In this talk, the status and specificities of this configuration will be presented together with selected physics cases submitted as letters of intent.

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