



AGATA@GANIL

Status report

AGATA 2021

The GANIL Campaign organization



The AGATA campaign at GANIL has been extended to the end of June 2021

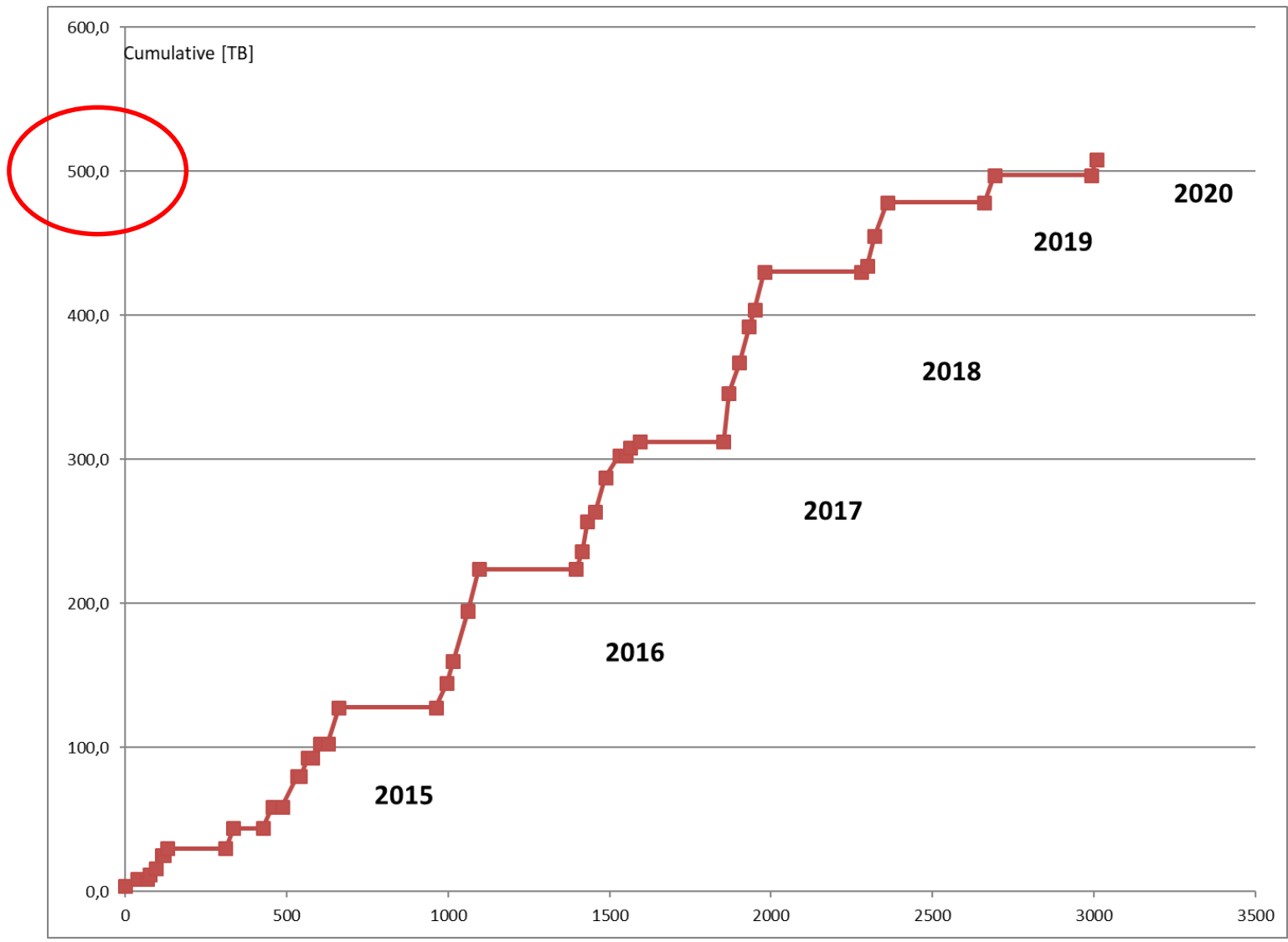
Each GANIL PAC has a “PrePac” workshop with a specific call : **AGATA Collaboration Meeting**

- ☞ 1st PAC in 2014 : VAMOS (10 experiments approved)
- ☞ 2nd PAC in 2015 : VAMOS || NEDA (10 experiments approved)
- ☞ 3rd PAC in 2016 : NEDA (6 experiments approved)
- ☞ 4th PAC in 2017: Fully opened : 2(1) VAMOS (MUGAST) approved
- ☞ 5th PAC in 2018 : MUGAST (2 experiments approved)
- ☞ 6th PAC in 2019 : MUGAST (1 experiment approved)
- ☞ 7th PAC in 2020 : VAMOS heavy ions (2 experiments re-approved)
- ☞ 8th PAC in 2021 : call in February –without AGATA

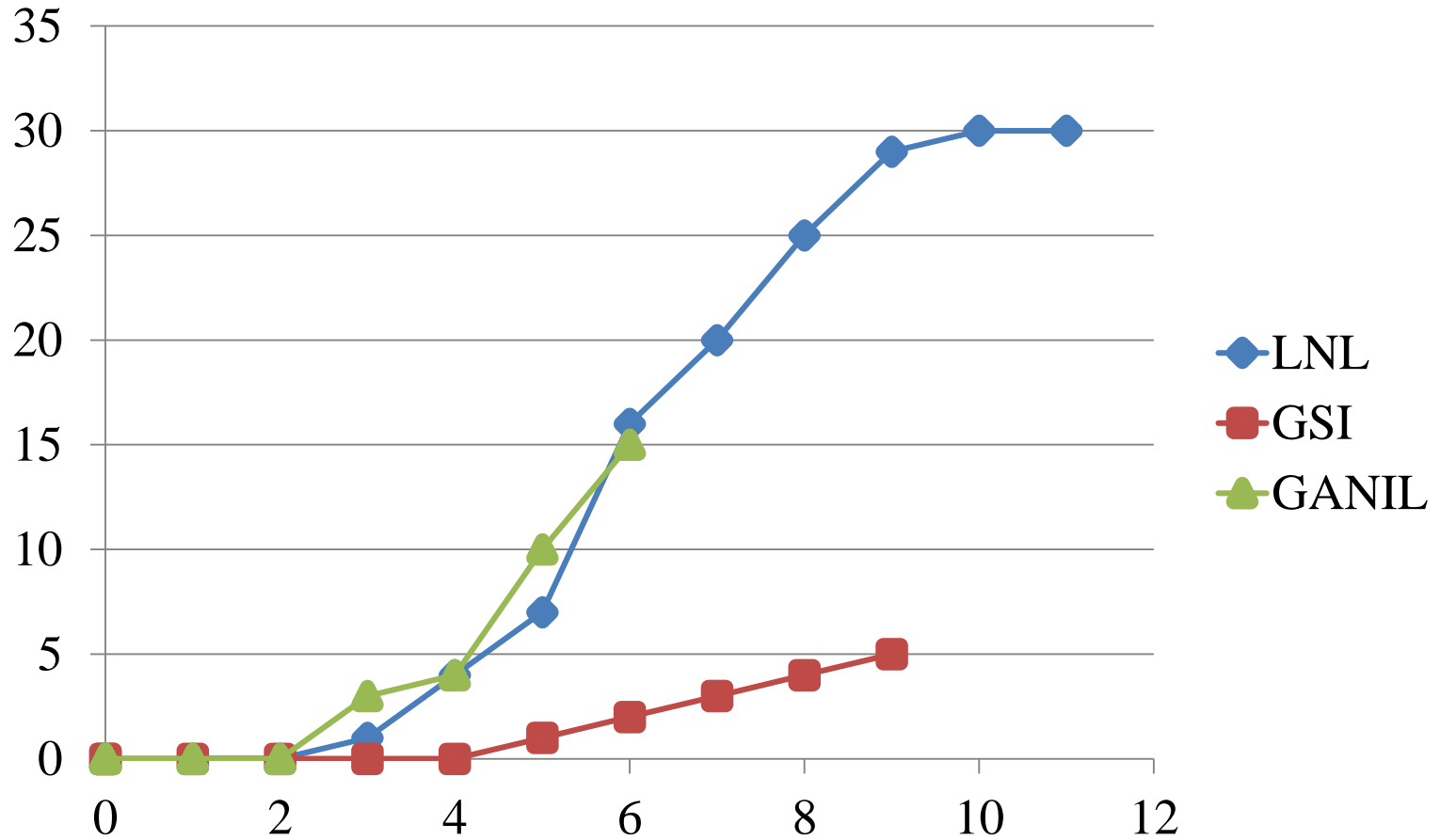
AGATA will leave GANIL in summer 2021 after the run

927 UT have been already approved

762 UT have been performed over 27 experiments (36 weeks of beam on Target)



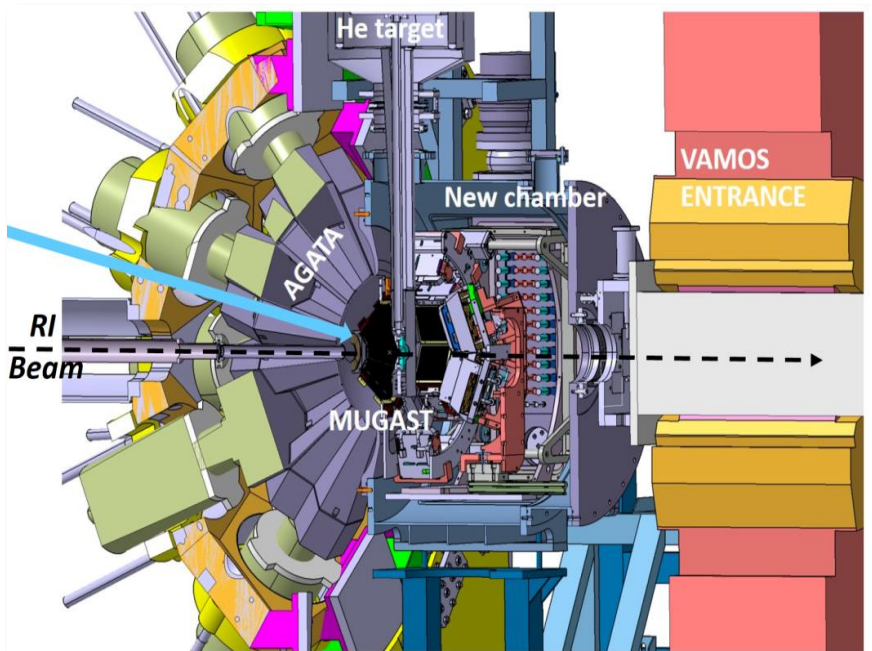
Published papers



MUGAST campaign 2019-2020-2021



Nucleons transfer spectroscopy using the SPIRAL1 ISOL beams



Nuclear Astrophysics: spectroscopic factors of relevant resonances for nucleosynthesis studies in radiative capture reactions: (${}^6\text{Li},d$), (${}^3\text{He},d$), (d,p)

Shell evolution:
spectroscopic factors, s.p. energies (d,p), (t,p), (${}^3\text{He},n$)
n-p pairing, clusterization

Lifetime measurement after single nucleon transfer

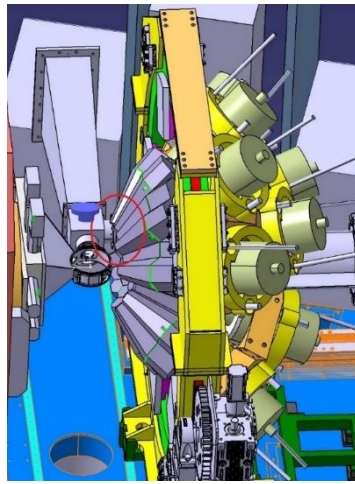
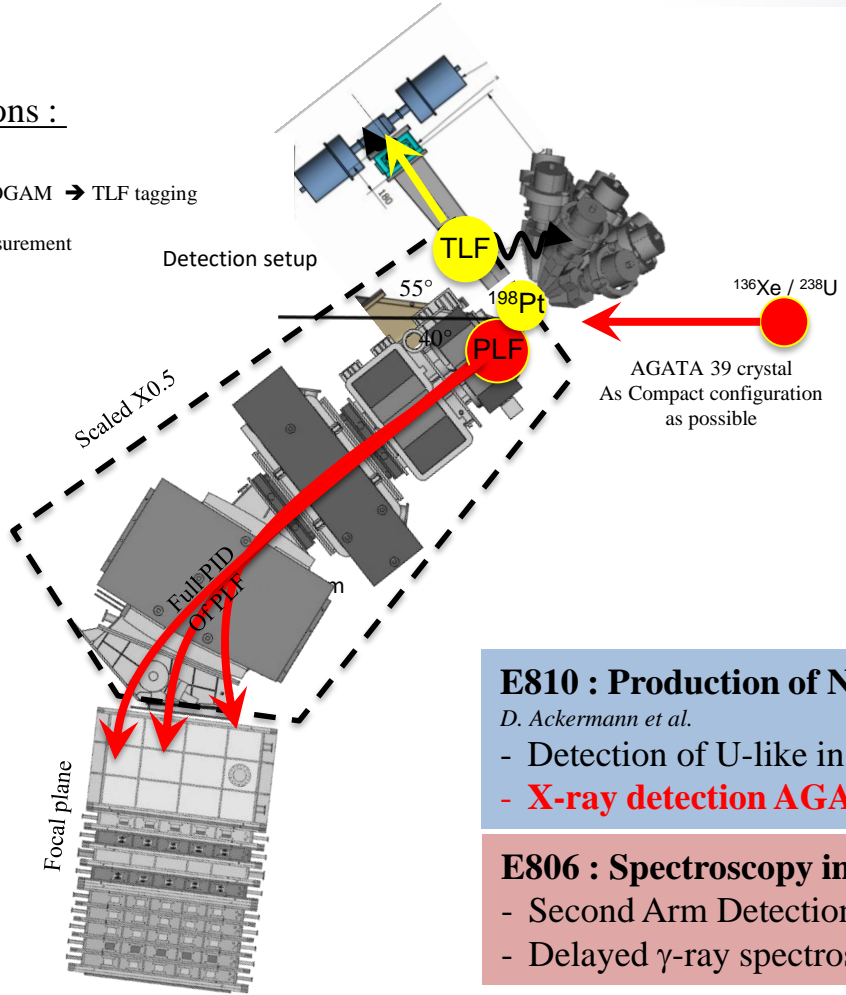
2018,2019 call for proposal

Start of the campaign in April 2019

Campaign manager : M. Assié (IPNO)

Motivations :

- 2nd arm + EXOGAM → TLF tagging
- μ s Isomer
- A, E* measurement

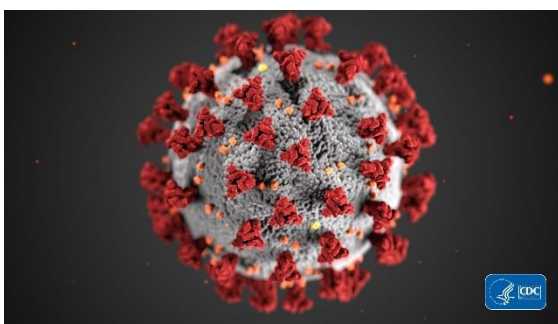


E810 : Production of Neutron rich nuclei using MNT $^{238}\text{U} + ^{238}\text{U}$.
D. Ackermann et al.

- Detection of U-like in VAMOS
- **X-ray detection AGATA + LEPS** **AGATA response function < 100 keV**

E806 : Spectroscopy in the vicinity of N=126 from MNT $^{136}\text{Xe} + ^{198}\text{Pt}$

- Second Arm Detection
- Delayed γ -ray spectroscopy



All the facility was shut-down
 Half of AGATA was warmed-up
 in a controlled way

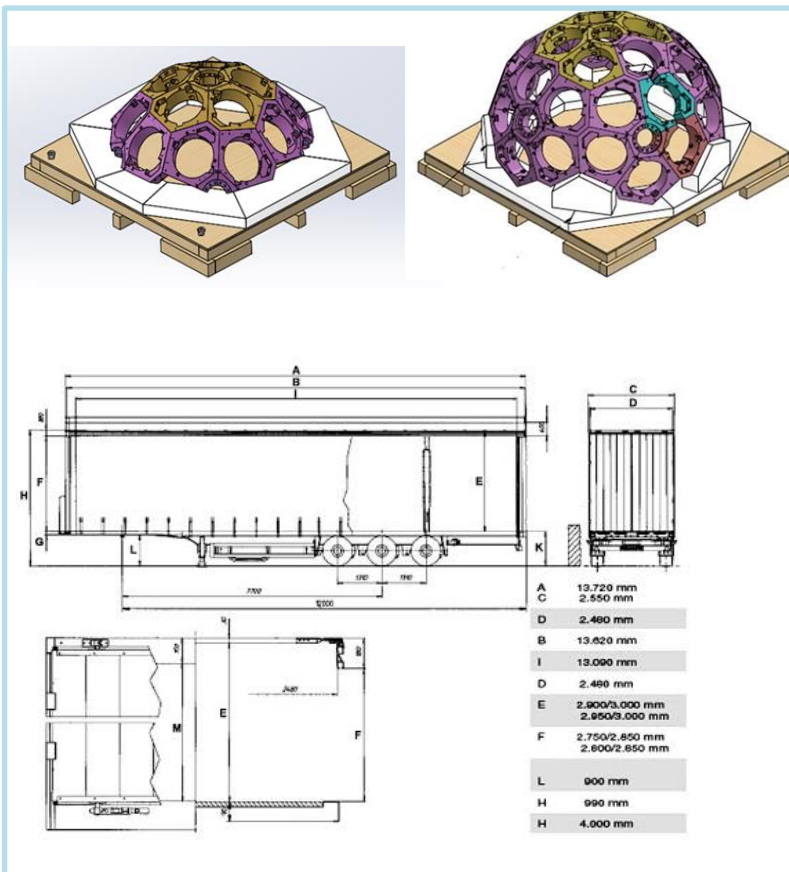
Most damaged by neutrons
 ATC5 Position 1 : b002, c009 → Sent to Mirion
 ATC7 Position 2 : a006, b013, c006 → Sent to Mirion ;
 Annealed and results shown

ATC3, Position 7 → Cryostat Annealing done
 ATC4 Position 13 → Cryostat Annealing done

ATC10, ATC12 → put back in the array in
 autumn
 ATC1 and ATC15 delivered by IPHC just before
 Christmas

→ 39 crystals for 2021 at the best

- Preparation to the Move



2021

Beam started on the 9th of March with re-scheduling of e793s $^{47}\text{K}(d,p)$ MUGAST (UK experiment)

Heavy Ions Mode

$^{238}\text{U} + ^{238}\text{U}$ D. Ackerman [20-29 May]

Xe + Pt Y. Kim [19 June – 2 July]

Experimental conditions will be complicated

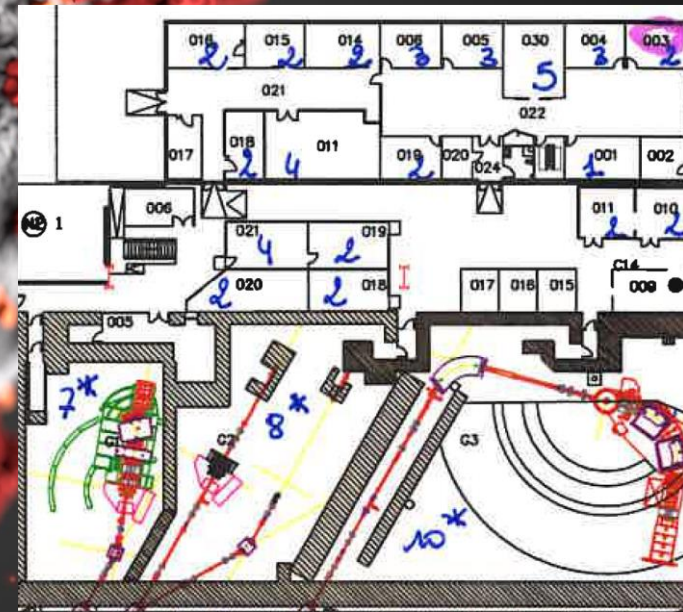
50% GH closed

Restaurant is open

GH kitchen is closed

ACQ kitchen ?

Couvre feu 18h



- GANIL DAQ in VNC via VPN

- AGATA DAQ in x2go via lxagata0