

TG3

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Experimental data: what is going on

- **E818 (Remy Bougault):**

- After the PhD thesis of Alex Rebillard-Soulié (defended in November 2024) a new thesis started in November 2025
- 1 article in preparation on the system $40\text{Ar}+58\text{Ni}@74\text{AMeV}$ concerning the isotopic production

- **E818-E789 (Lucia Baldesi)**

- Lucia Baldesi ended her PhD thesis in October 2025; the defence is expected in April 2026
- A paper concerning the analysis of the $58\text{Ni}+58\text{Ni}@32,52,74\text{AMeV}$ systems is in preparation. It concerns the study of the midvelocity emission and its isotopic composition, with a calorimetric reconstruction of the primary sources.

- **E884 (Caterina Ciampi)**

- Data reduction still in progress (some refinements are still necessary also on the already completed parts)
- Brunilde Gnoffo will join GANIL as visiting scientist in Summer 2026 and she will work on these data
- The funding of a new PhD thesis has been requested in LPC

Experimental data: what is going on

- **E881 (Diego Gruyer)**

- Data reduction almost completed, some parts need to be refined
- Data analysis: the study of the elastic and inelastic cross section is in progress (Ilham Dekhissi); the study of one nucleon transfer is in progress (Andrea De Rosa). Other topics will be faced in the future by the same team (plus maybe Maxime Henri): complex fragment transfer, fusion

- **FAZIAZERO (Ge Guo)**

- Ge Guo is currently in Florence for a stage, he will end his PhD in 2026.
- A first paper concerning the differential cross section as a function of the polar angle for light fragments was already submitted to the Collaboration
- A second paper is in preparation; it concerns the comparison of the experimental cross sections with the prediction of the AMD model plus different afterburners (HFI, GEMINI++, the internal afterburner of AMD)

- **FAZIATHIN (Simone Valdré)**

- The experiment was performed in November 2025 in LNL to test a FAZIA block where the first Si layer had a thickness of about 20 μm .
- Analysis in progress to obtain the figures of merit for the different ions.

Experimental data: what is going on

- **FAZIACOR (Silvia Piantelli, Alberto Camaiani, Giacomo Poggi)**
 - The paper concerning a bayesian analysis aimed at the estimation of two parameters of AMD (one related to the in medium cross section and one to the clustering) was submitted to PRC in November 2025
 - The referee asked for major revisions; unfortunately one of the criticism cannot be solved because the referee asked to widen the range of investigation of one of the parameters since the maximum of the likelihood is located on the edge of the interval, but the physical quantity related to this parameter already saturates at the extreme of the explored range.
 - We explained this fact to the referee (without implementing the other requested modifications because in case of negative response it would be unuseful); we are waiting for the answer

Simulations

- Many different and time consuming simulated data have been produced over the years and stored in Lyon. They are fundamental for the data analysis of the experimental campaigns.
- Everyone produced his simulations, without any standard. Some of them were filtered with Kalivedasym, others were not.
- Up to now these simulated data have been placed in the /sps/ disk, in the subdirectory deemed appropriate by the author
- Starting from this year the CCIN2P3 will clean the /sps/ disk of every file not used for more than 2 years.
- Therefore the simulated data risk to be deleted.
- John is planning to collect the simulated data in the HIROD/HPSS system, where they will be permanently stored. They will be accessed by Kalivedasym as the experimental data. They will be equipped with all the metadata characterizing them.
- This requires a lot of work (from his part) and a lot of collaboration by the users.
- Everybody wishing to keep his simulated data stored in Lyon must inform the TG3 conveneers and provide us with a metadata file explaining the features of the particular version of the simulation used to produce these data. Moreover he will have to take care of writing the proper KVSimReader class to handle these data (unless they have been produced by a standard code and already written in the standard accepted by Kalivedasym)