



# Ancillary detectors (AGATA pre-PAC@LNL)

8/11/2021

$\gamma$  scintillators

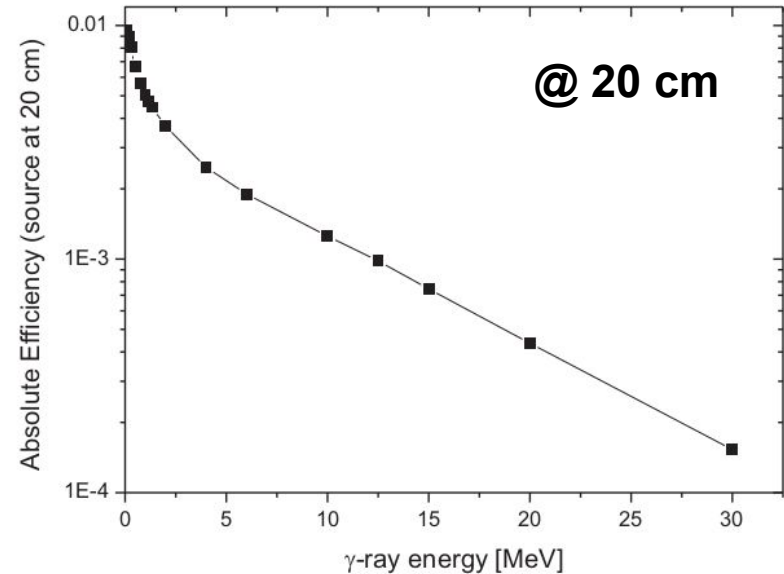
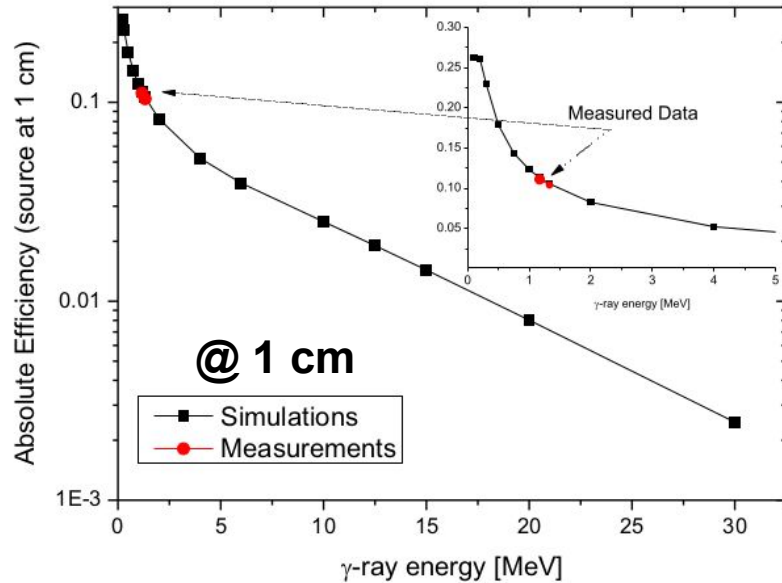
Contacts:

Eugenio R. Gamba ([eugenio.gamba@mi.infn.it](mailto:eugenio.gamba@mi.infn.it))

Sara Pigliapoco ([sara.pigliapoco@pd.infn.it](mailto:sara.pigliapoco@pd.infn.it))

# Available detectors:

- $\text{LaBr}_3(\text{Ce})$  ( 3.5'' x 8'' )
  - 2
  - Absolute efficiency @ 1.3 MeV:



# Available detectors:

- LaBr<sub>3</sub>(Ce) ( 3'' x 3'' )
  - 7 (Milano)
  - Absolute efficiency @ 1.3 MeV (20 cm) : 2.5/10 detectors
- LaBr<sub>3</sub>(Ce) ( 2'' x 2'' )
  - 8
  - Absolute efficiency @ 1.3 MeV (12 cm) : ~1

→ READOUT: CAEN V1730 (500 MS/s sampling rate)

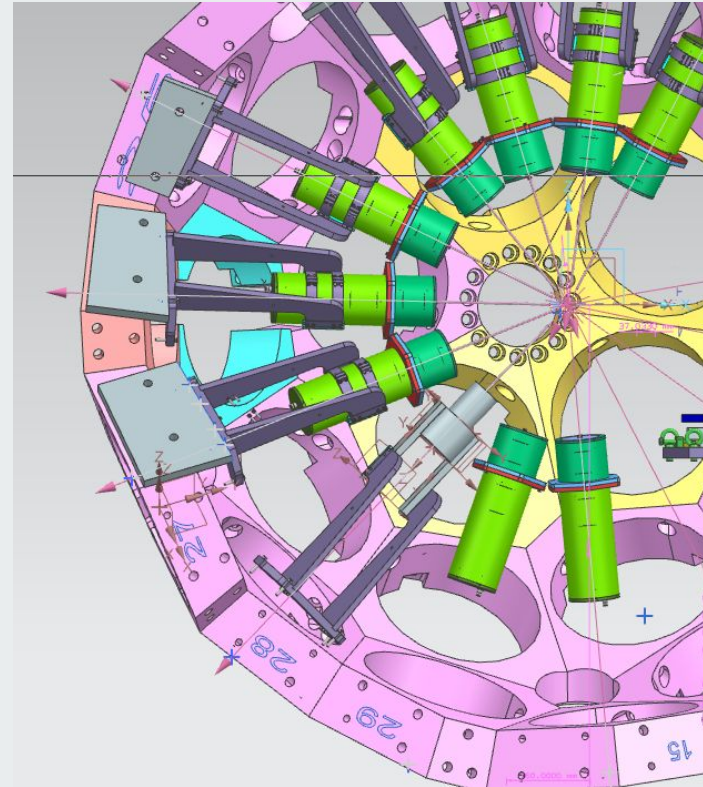
## Technical info:

☆ Holding structure already available



## Technical info:

- ★ Holding structure already available
- ★ Maximum number of detectors that can be included is 10
- ★  $\text{LaBr}_3(\text{Ce})$  3''x3'' need to seat at 255 mm from target position  
To avoid clashes with AGATA Clusters



- ❖ **PARIS scintillator array:**
  - contact person A. Maj

# Scintillator Array

- ❖ **PARIS scintillator array:**

- contact person A. Maj

- ❖ **FATIMA scintillator array:**

- #36, 1.5" x 2":

- 2022/2023 - NuBall2 campaign + RIKEN

# Scintillator Array

## ❖ PARIS scintillator array:

- contact person A. Maj

## ❖ FATIMA scintillator array:

- #36, 1.5" x 1.5" x 0.5" 
  - 2022/2023 JuBall2 campaign + RIKEN




# Scintillator Array

## ❖ PARIS scintillator array:

- contact person A. Maj

## ❖ FATIMA scintillator array:

- #36, 1.5" x 1.5" 
  - 2022/2023 JuBall2 campaign + RIKEN
- Madrid (Luis M. Fraile):
  - 10 - conic-shaped
  - compatible with existing support system

**Thank you!**