

Agenda CB



Status report of running projects-

Projects at LUNA 400kV : from January 2025 -to June 2025 and to December 2025- according to our Proposal -

Projects for Bellotti IBF next call-beam time : January 2025-December 2025-

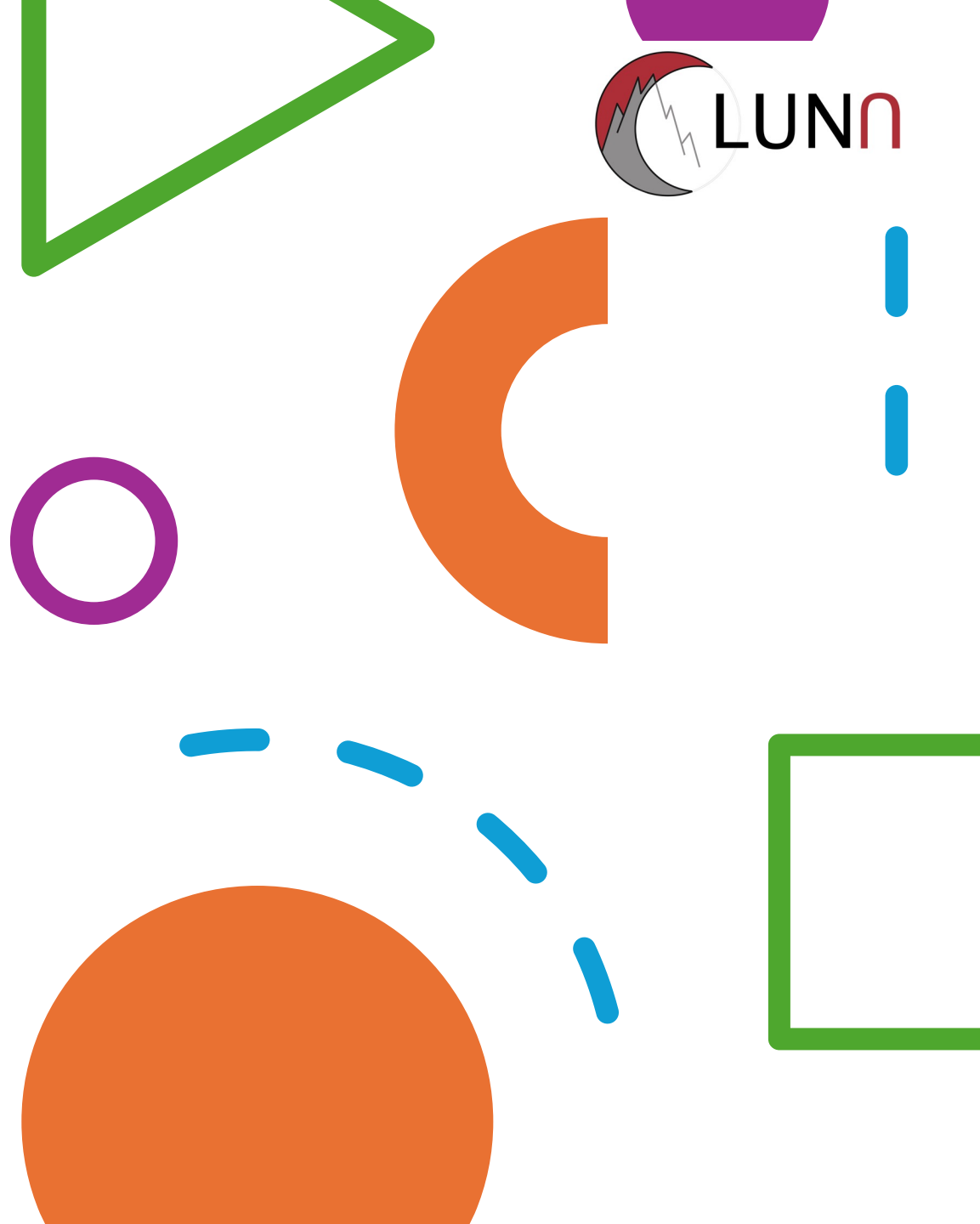
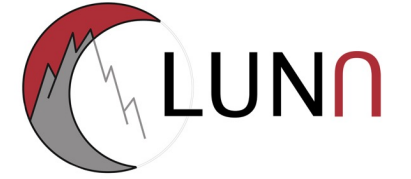
Participation or submission Proposal to Bellotti IBF outside LUNA -

Possible financial support from no INFN partners-



Status report of running projects

- $^{14}\text{N}(p,\gamma)^{15}\text{O}$ at LUNA 400kV had issues with: LNGS UPS-Accelerator Integrator – btw collected data
- $^{23}\text{Na}(p,\alpha)^{20}\text{Ne}$ had issues with cold trap insulations- no data yet-
- Bellotti IBF stopped beam from 09/04/2024
- $^{14}\text{N}(p,\gamma)^{15}\text{O}$ analysis had almost completed data taking, missing last data at angles configuration B: 0° , 120° , 90° (configuration A : 55° , 135° , 90°)
- $^{22}\text{Ne}(\alpha,n)^{25}\text{Mg}$ had issues with collimator not colled- beam induced bck-btw collected data for beam heating –density profile-
- $^{12}\text{C}+^{12}\text{C}$ had completed Pb shielding-HPGe running- NaI array tender published and approaching the offer opening



Projects at LUNA 400kV : from January 2025 -to June 2025 and to December 2025- according to our Proposal

	Q1			Q2			Q3			Q4		
2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$^{27}\text{Al}+p$	█	█	█									
$^{19}\text{F}+p$		█	█	█	█							
$^{10}\text{B}+\alpha$				█	█	█						
$^{24}\text{Mg}+p$						█	█					
$^{19}\text{F}+p$									█	█	█	

Tentative timeline of the research program related to the first year 2025



Projects at LUNA 400kV : from January 2025 -to June 2025

$^{27}\text{Al}(p,\alpha)^{24}\text{Mg}$ -> Carlo Bruno ELDAR ERC-St
Grant

$^{19}\text{F}(p,\gamma)^{20}\text{Ne}$. (4+3 months)

$^{10}\text{B}+\alpha$ reactions -> MariaLuisa Aliotta
NUCLEAR ERC-Advanced Grant (8 months
vs 3)

$^{24}\text{Mg}(p,\gamma)^{25}\text{Mg}$ (2 months)

Shades requires other 8 weeks (considering 24h of beam)

12C+12C all possible BTU

New proposed project:

$^{22}\text{Ne}(\alpha,\gamma)^{26}\text{Mg}$ EAS γ project MUR Andreas Best-gas target of Shades+6 wedge-shaped NaI detectors of dimensions 4"x4"x6" in delivering

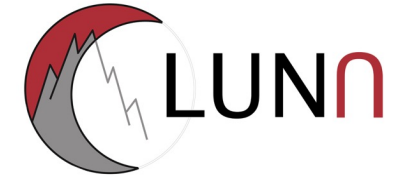
5 weeks for array detectors-structure setup-possible table with wheels



FTE INFN

sezione	Ricercatori		Tecnologi	
	fte	pers.	fte	pers.
BA (3 PERSONE - 1 FTE)	1 fte	3 pers.	0 fte	pers.
	1.00 fte / 3 pers. (media 0.33)			
GE (3 PERSONE - 2 FTE)	2 fte	3 pers.	0 fte	pers.
	2.00 fte / 3 pers. (media 0.67)			
LNGS (4 PERSONE - 3.4 FTE)	3 fte	3 pers.	0.4 fte	1 pers.
	3.40 fte / 4 pers. (media 0.85)			
LNL (4 PERSONE - 1.5 FTE)	0.4 fte	1 pers.	1.1 fte	3 pers.
	1.50 fte / 4 pers. (media 0.38)			
MI (2 PERSONE - 2 FTE)	2 fte	2 pers.	0 fte	pers.
	2.00 fte / 2 pers. (media 1.00)			
NA (7 PERSONE - 3.65 FTE)	3.65 fte	7 pers.	0 fte	pers.
	3.65 fte / 7 pers. (media 0.52)			
PD (6 PERSONE - 4.5 FTE)	4.5 fte	6 pers.	0 fte	pers.
	4.50 fte / 6 pers. (media 0.75)			
RM1 (3 PERSONE - 1.35 FTE)	1.35 fte	3 pers.	0 fte	pers.
	1.35 fte / 3 pers. (media 0.45)			
TO (4 PERSONE - 2.1 FTE)	1.6 fte	3 pers.	0.5 fte	1 pers.
	2.10 fte / 4 pers. (media 0.53)			
TOTALE (36 PERSONE - 21.5 FTE)	19.5 fte	31 pers.	2 fte	5 pers.

Similar picture for



Atomki- **5 members + Maria Lugaro**

Zsolt, Gyuri, Zoltan, Laszlo, Tamas

Dresda- **3 members**

Daniel, Axel, Eliana

Edinburgh- **7 members**

Marialuisa, Tom, Carlo, Jordan

Ragan, Lucia, Duncan,

News 2025

Bari -> Francesco Barile is leaving

Fausto Casaburo left from may

Padova-> Carlo Broggin-Denise Piatti reduced %, add 1AdR

Torino-> add 1AdR

Milano->add 1AdR

LNGS->add 1AdR

Genova->1AdR

Participation or submission Proposal to Bellotti IBF
outside LUNA -



Possible financial support from no INFN partners-



Shift from January to June 2024

- Padova
- LNGS
- Lisbon
- Milano
- Torino
- Bari
- Roma
- Napoli
- Genova
- Edinburgh
- Debracen
- Dresda