



**P**lasmas for  
**A**strophysics,  
**N**uclear  
**D**ecays  
**O**bservation and  
**R**adiation for  
**A**rchaeometry



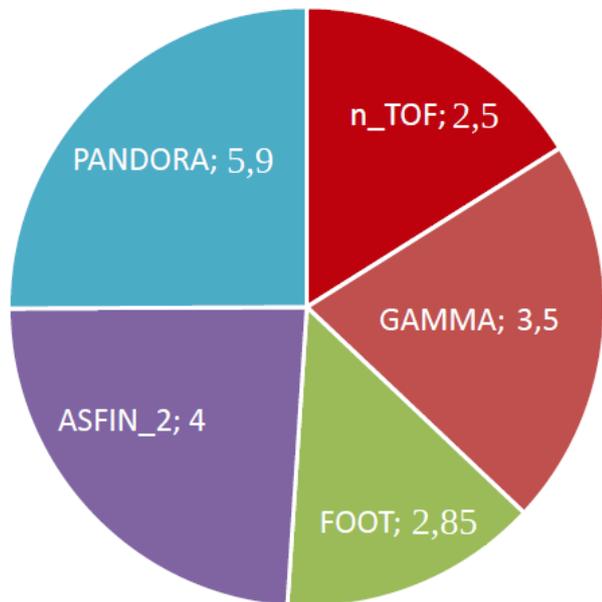
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Of Target



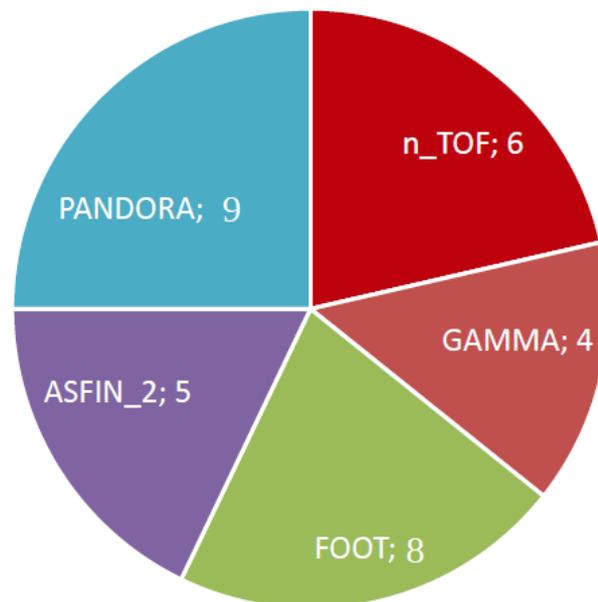
# PREVENTIVI DI SPESA PER L'ANNO 2024 DEL GRUPPO 3

Coordinatore L. Servoli

FTE



RICERCATORI/TECNOLOGI



- 30 ricercatori
- 18.85 fte
- 5 Esperimenti (3 Astrofisica Nucleare, 1 Struttura Nucleare, 1 Fisica Nucleare applicata)
- 4 sedi (PG, Cam, RM, TE)
- 4 enti (INFN, UniPG, UniCAM, INAF)

cognome	nome	modulo	contratto	profilo	aff	ASFIN_2	FOOT	GAMMA	N_TOF	PANDORA_GR3	totale
Totale(FTE)						4	2,85	3,5	2,5	5,9	18,85
Alpat	Ali Behcet	G1	Dip	Primo Ricercatore	2		20				20
Barbanera	Mattia	G2	Dip	Tecnologo	2		20				30
Bezmalinovich	Matteo	G1	Ass	Scientifica Dottorandi	3					100	100
Busso	Maurizio Maria	G1	Ass	Associazione Senior	3				50	50	100
Chieffi	Alessandro	G1	Ass	Associazione Senior	3	100					100
Cittadini	Federico	G1	Ass	Scientifica Laureandi Magistrali						100	100
Cottone	Francesco	G1	Ass	Scientifica Ricercatori/Professori università	3			100			100
Cristallo	Sergio	G1	Ass	Scientifica Dipendenti altri enti	3				50		50
Fiandrini	Emanuele	G1	Ass	Incarico di Ricerca scientifica	2		20				20
Kanxheri	Keida	G1	Ass	Scientifica Ricercatori/Professori università	5		0				
Limongi	Marco	G1	Ass	Scientifica Dipendenti altri enti	3	50					50
Nucci	Maria Clara	G1	Ass	Scientifica Ricercatori/Professori università	3	100					100
Palmerini	Sara	G1	Ass	Incarico di Ricerca scientifica	3	50				50	100
Perri	Marco	G1			3			100			100
Petrillo	Caterina	G1	Ass	Scientifica Ricercatori/Professori università	3				20		20
Pezerini	Francesca	G1	Ass	Scientifica Dottorandi	3		0				
Piersanti	Luciano	G1	Ass	Scientifica Dipendenti altri enti	3				50		50
Placidi	Pisana	G1	Ass	Scientifica Ricercatori/Professori università	1		20				20
Presentini	Francesco	G1			3					100	100
Rinaldi	Matteo	G1	Dip	Ricercatore	4					20	20
Saltarelli	Alessandro	G2	Ass	Tecnologica Ricercatori/Professori università	3			100			100
Salvi	Lucia	G1	Ass	Scientifica Dottorandi			100				100
Servoli	Leonello	G1	Dip	Primo Ricercatore	3		55				55
Silvestre	Gianluigi	G1	Dip	Assegno di Ricerca	3		50				50
Simonucci	Stefano	G1	Ass	Scientifica Ricercatori/Professori università	3			50		50	100
Triggiani	Francesca	G1	Ass	Scientifica Dottorandi	3					100	100
Ventura	Paolo	G1	Ass	Scientifica Dipendenti altri enti	3				50		50
Vescovi	Diego	G1	Ass	Scientifica Dipendenti altri enti					30	20	50
Vukman	Nikola	G1	Dip	Assegno di Ricerca	3	100					100

Autori	Titolo	Rivista	Anno	Tot			IF	Fraz.IF	CIT.	Sigla	Str.
				Tot	INFN	%					
1. Harrouz, DS et al.	Experimental study of the Si-30(He-3, d) P-31 reaction and thermonuclear reaction rate of Si-30(p, gamma)X 3)1P WOS:000752560800005   10.1103/PhysRevC.105.015805	PHYS REV C	2022	16	6	38	3.199	1.22	1 (f)	ASFIN2	LNS+
2. Mascali, D et al.	A Novel Approach to beta-Decay: PANDORA, a New Experimental Setup for Future In-Plasma Measurements WOS:000762043000001   10.3390/universe8020080	UNIVERSE-BASEL	2022	70	35	50	2.813	1.41	12 (f)	GAMMA	LNS+
Mascali, D et al.	A Novel Approach to beta-Decay: PANDORA, a New Experimental Setup for Future In-Plasma Measurements WOS:000762043000001   10.3390/universe8020080	UNIVERSE-BASEL	2022	70	35	50	2.813	1.41	12 (f)	PANDORA_GR3	LNS+
3. Sergi, ML et al.	Trojan Horse Investigation for AGB Stellar Nucleosynthesis WOS:000762074600001   10.3390/universe8020128	UNIVERSE-BASEL	2022	18	16	89	2.813	2.5	(f)	ASFIN2	LNS+
4. Massimi, C et al.	n_TOF: Measurements of Key Reactions of Interest to AGB Stars WOS:000762514400001   10.3390/universe8020100	UNIVERSE-BASEL	2022	4	2	50	2.813	1.41	2 (f)	N-TOF	BO+
5. Tagliente, G et al.	Zr-92(n, gamma) and (n,tot) measurements at the GELINA and n_TOF facilities WOS:000766732800002   10.1103/PhysRevC.105.025805	PHYS REV C	2022	116	14	12	3.199	0.38	1 (f)	N-TOF	BA+
6. Kanxheri, K et al.	The Microstrip Silicon Detector (MSD) data acquisition system architecture for the FOOT experiment WOS:000777801300002   10.1088/1748-0221/17/03/C03035	J INSTRUM	2022	12	12	100	1.121	1.12	(f)	FOOT	PG+
7. Abrams, D et al.	Measurement of the Nucleon F-2(n)F-2(p) Structure Function Ratio by the Jefferson Lab MARATHON Tritium/Heium-3 Deep Inelastic Scattering Experiment WOS:000791077600007   10.1103/PhysRevLett.128.132003	PHYS REV LETT	2022	132	6	5	9.185	0.46	13 (f)	JLAB12	CT+
8. Souropanis, D et al.	Linking the properties of accreting white dwarfs with the ionization state of their ambient medium WOS:000791556200015   10.1053/mnras/stac890	MON NOT R ASTRON SOC	2022	8	1	13	5.235	0.68	(f)	N-TOF	PG
9. La Cognata, M et al.	Exploring the astrophysical energy range of the Al-27(p, alpha)Mg-24 reaction: A new recommended reaction rate WOS:000792884500028   10.1016/j.physletb.2022.136917	PHYS LETT B	2022	22	19	86	4.95	4.26	1 (f)	ASFIN2	LNS+
10. Gervino, G et al.	NEAR: A New Station to Study Neutron-Induced Reactions of Astrophysical Interest at CERN-n_TOF WOS:000803437900001   10.3390/universe8050255	UNIVERSE-BASEL	2022	17	9	53	2.813	1.49	(f)	N-TOF	TO+
11. de Vera, P et al.	Energy Deposition around Swift Carbon-Ion Tracks in Liquid Water WOS:0008080607800001   10.3390/ijms23116121	INT J MOL SCI	2022	7	3	43	6.208	2.67	5 (f)	GAMMA	TIFP+
12. Marchini, N et al.	Electric monopole transitions and structure of low-spin states in Pd-106 WOS:000809497100001   10.1103/PhysRevC.105.054304	PHYS REV C	2022	14	12	86	3.199	2.75	(f)	GAMMA	FI+
13. Moreno-Soto, J et al.	Constraints on the dipole photon strength for the odd uranium isotopes WOS:000810791100001   10.1103/PhysRevC.105.024618	PHYS REV C	2022	130	20	15	3.199	0.48	1 (f)	N-TOF	LNS+
14. Taloui, S et al.	Theoretical Estimate of the Half-life for the Radioactive Cs-134 and Cs-135 in Astrophysical Scenarios WOS:000824342400001   10.3847/1538-4357/ac74b3	ASTROPHYS J	2022	7	5	71	5.521	3.92	3 (f)	PANDORA_GR3	PG
15. Liu, N et al.	Slow Neutron-Capture Process: Low-Mass Asymptotic Giant Branch Stars and Presolar Silicon Carbide Grains WOS:000831472200001   10.3390/universe8070362	UNIVERSE-BASEL	2022	3	1	33	2.813	0.93	1 (f)	N-TOF	PG
16. Gugliemini, A et al.	Scientific motivations for a reassessment of the neutron capture cross sections of erbium isotopes in the high-sensitivity thermal energy range for LW... WOS:000843486900001   10.1016/j.anucene.2022.109337	ANN NUCL ENERGY	2022	6	4	67	1.81	1.21	(f)	N-TOF	BO+
17. Khalek, RA et al.	Science Requirements and Detector Concepts for the Electron-Ion Collider WOS:000858728200001   10.1016/j.nuclphysa.2022.122447	NUCL PHYS A	2022	411	61	15	1.558	0.23	62 (f)	EIC_NET	TO+
18. Pidatella, A et al.	Experimental and numerical investigation of magneto-plasma optical properties toward measurements of opacity relevant for compact binary objects WOS:000873938700001   10.3389/fspas.2022.931744	FRONT ASTRON SPACE	2022	19	16	84	4.055	3.41	(f)	PANDORA_GR3	LNS+
21. Vesovi, D et al.	Neutron-capture measurement candidates for the r-process in neutron star mergers WOS:000875659000001   10.3389/fspas.2022.994980	FRONT ASTRON SPACE	2022	4	1	25	4.055	1.01	(f)	N-TOF	PG
22. Mucciola, R et al.	Evaluation of resonance parameters for neutron interactions with molybdenum WOS:000876961900001   10.1016/j.nimb.2022.09.019	NUCL INSTRUM METH B	2022	8	2	25	1.279	0.32	(f)	N-TOF	PG+
23. Liu, N et al.	Presolar silicon carbide grains of types Y and Z: their strontium and barium isotopic compositions and stellar origins WOS:000881716500002   10.1140/epjqs/10050-022-00838-z	EUR PHYS J A	2022	8	1	13	3.131	0.41	(f)	N-TOF	PG
24. Lenaz, D et al.	The Osterplana Fossil Meteorites and ... What Else? Terrestrial Cr-Spinels and Zircon in the Ordovician Limestones of the Thorsberg Quarry (Sweden) WOS:000885248800001   10.3390/geosciences12020054	GEOSCIENCES	2022	4	1	25	0.1	0.03	(f)	ERNA2	PG
25. La Cognata, M et al.	A New Reaction Rate of the Al-27(p/alpha)Mg-24 Reaction Based on Indirect Measurements at Astrophysical Energies and Implications for Al-27 Yields of... WOS:000898332200001   10.3847/1538-4357/ac9c5e	ASTROPHYS J	2022	24	19	79	5.521	4.36	(f)	ASFIN2	LNS+
26. Toppl, M et al.	Elemental fragmentation cross sections for a O-16 beam of 400 MeV/u kinetic energy interacting with a graphite target using the FOOT Delta E-TOF detec... WOS:000898952300001   10.3389/fphy.2022.579229	FRONT PHYS-LAUSANNE	2022	105	57	54	3.718	2.01	(f)	FOOT	PG+
27. Mascali, D et al.	Editorial: Nuclear physics and astrophysics in plasma traps WOS:000899240100001   10.3389/fspas.2022.1087543	FRONT ASTRON SPACE	2022	6	3	50	4.055	2.03	(f)	GAMMA	CT+
Mascali, D et al.	Editorial: Nuclear physics and astrophysics in plasma traps WOS:000899240100001   10.3389/fspas.2022.1087543	FRONT ASTRON SPACE	2022	6	3	50	4.055	2.03	(f)	PANDORA_GR3	CT+
28. Alexandrov, A et al.	Characterization of 1507m thick silicon microstrip prototype for the FOOT experiment WOS:000912654400005   10.1088/1748-0221/17/12/P12012	J INSTRUM	2022	108	91	84	1.121	0.94	(f)	FOOT	NA+
29. Bravo, E et al.	Chandrasekhar-mass white dwarfs are the progenitors of a small fraction of Type Ia supernovae according to nucleosynthesis constraints WOS:000934003200007   10.1093/mnras/stac103	MON NOT R ASTRON SOC	2022	6	3	50	5.235	2.62	(f)	N-TOF	PG+

# Tesi di Laurea CSN3 2022

cognome	titolo	tesi_tipo	universita	Sigla	Sezione
Migliozzi G. (M)	Il modello stellare di Lane-Emden	Triennale	Universita' Di Camerino	<b>PANDORA_GR3</b>	PG
Cittadini F. (M)	Equazione di Dirac in uno spazio-tempo curvo	Triennale	Universita' Di Camerino	<b>GAMMA</b>	PG
Marchini N. (F)	Electron Spectroscopy with the SLICES setup	Dottorato	Universita' Di Camerino	<b>GAMMA</b>	FI
Bezmalinovich M. (M)	Numerical investigation of non-homogeneous ECR plasma opacities relevant for the study of compact binary merger electromagnetic transients	Magistrale	Universita' Di Camerino	<b>PANDORA_GR3</b>	PG
Casci S. (M)	Il confinamento del plasma nei reattori a fusione	Triennale	Universita' Di Camerino	<b>GAMMA</b>	PG

# Richieste finanziarie 2024

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	Missioni	«Altro»	
DOT3	13.5 k€	30.5 k€	
ASFIN2	27.0 k€	---	
FOOT	17.0 k€	2 k€	
GAMMA	13.0 k€	21.0 k€	
nTOF	13.0 k€	---	
PANDORA	--- k€	--- k€	
	83.5 k€	53.5 k€	

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