

Summer School

on Particle and Astroparticle Physics



















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GraSPA 2024, 2025

> https://lapp.in2p3.fr/graspa2024 https://lapp.in2p3.fr/graspa2025



What? How?

- 1 week-long School, ~4h (theoretical & experimental) introductory courses on few topics: LHC physics, neutrinos, heavy flavours, astrophysics, astroparticles, dark matter, gravitational waves. Hands-on sessions on computational tools (ROOT), Virgo-like interferometers, astroparticle pheno. Q&A session on careers in research/academia
- Accommodation and lunches paid by School, travel funded by students or their institutions (travel grants for few students, a few paid by IDPASC institutes).
- Mostly local lecturers, a few high profile externals
- Budget ~ 19 k€ in 2024, 20.5 k€ in 2025 (from Enigmass, LAPP, LAPTh, Université Savoie Mont Blanc, CPTGA, INSU, IN2P3)

Erasmus+ BIP attempt in 2024

- Blended Intensive Programme: hybrid (online + in-person parts), short training programmes now eligible for Erasmus+ funding (both for students AND for organisers). Minimum of 15 Erasmus+ students required!!!
- Multitude of difficulties encountered, mostly administrative/bureaucratic:
 - BIP application deadlines different for each university, often only 1 or 2 calls per year
 - Some Internation Relations (IR) departments not responding
 - Some IR departments/contact people not really aware how BIPs work
 - Some universities keep BIP funding for the programmes organised by their partners only
 - Even when all of the above was fine, Erasmus agreements did not always cover BIPs → needed additional iterations between IR departments to modify agreement in a hurry
- Result:
 - minimum of 15 Erasmus+ students not attained
 - → Erasmus+ label retired 1 month before start of the School
 - → less funding for School, and for applicants that had managed through all the bureaucratic steps!
- Conclusion: take time to ensure all the above difficulties have been addressed by a sufficiently high number of partners before trying again

IDPASC @Paris 19/07/2025 Pablo del Amo Sánchez - Uni Savoie Mont Blanc / LAPP - IN2P3

GraSPA in 2025

- 67 applications, 30 admitted (+4 local summer students)
- Decrease in applications: ~100 →67.
 Overabundance of Schools for undergraduates? Network of contacts less effective?
- ~1/2 3rd year students (end bachelor),
 ~1/2 4th year students (beginning master)
- New in 2024: all students do a 5-min presentation on their project work/summer work/physics topic of interest
- 14 students from IDPASC institutes (Lisboa, Oviedo, Padova, Paris Sorbonne, Paris Cité, Trento, Valencia)

	Wed 16	Thu 17	Fri 18	Sat 19	Mon 21	Tue 22	Wed 23
8:30-9:00	Welcom e to the labs (30')	Students (6)	LHC Physics [Covarelli]				
9:00-9:30	Intro to PP	(B)SM		Hands-on	Astroparticle & Cosmology	Gravitational Waves EXP	Gamma-ray Astrophysics
9:30-10:00	[del Amo Sanchez]		Flavour Physics		TH [Serpico]	[Gouaty]	[Caroff]
10:00-10:30			[Guadagnoli]		coffee	coffee	coffee
10:30-11:00	coffee	coffee	coffee		Astroparticle & Cosmology TH	Gravitational Waves EXP	Gamma-ray Astrophysics
11:00-11:30	Students (1,2)	(B)SM	LHC Physics [Covarelli]		[Serpico]	[Gouaty]	[Caroff]
11:30-12:00					Neutrino Physics		
12:00-14:00	lunch		lunch	lunch	[López- Moreno]	lunch	lunch & school's
		Lunch (from 12:30)			Lunch (from 12:30)		Silid
14:00-15:00	Intro to detectors [Lorenzo Martinez]	Students (7,8)	Visit to CERN	Hands-on	Gravitational Waves TH [Romero-Rodriguez]	Dark matter & axion detection [Giannotti]	
15:00-16:00	Intro to Astrophy sics [Genolini]	Flavour Physics [Guadagnoli]			Gravitational Waves TH [Romero-Rodri guez]	Dark matter & axion detection [Giannotti]	
16:00-16:30	coffee	coffee			coffee	coffee	
16:30-17:30	Intro to Astrophy sics [Genolini] 17:00 Students (3)	Flavour Physics [Guadagnoli]			Neutrino Physics [López- Moreno]	Q&A session	
17:30-18:00	Students (4,5)	Students (9,10)					
	18:30 Receptio n			19h30: Dinner			

GraSPA in 2025

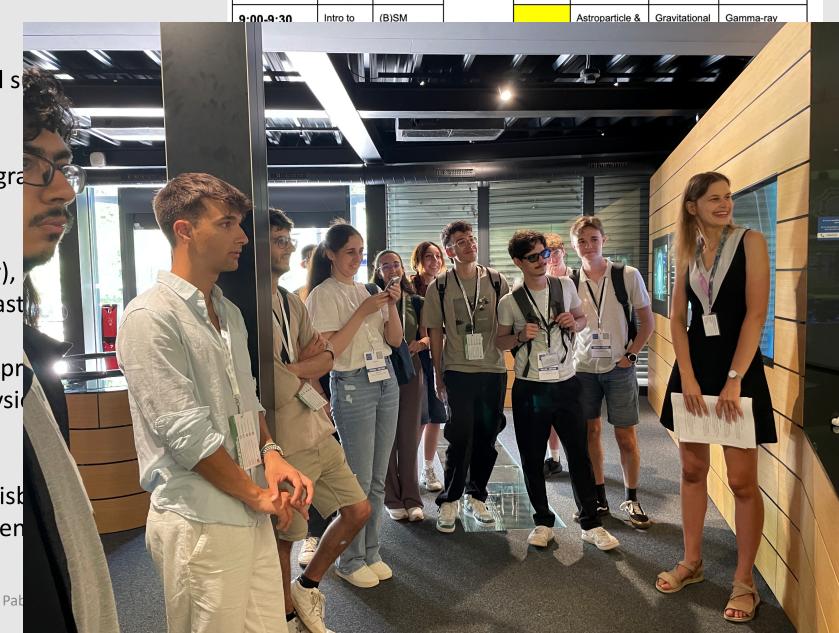
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Students (6)

Fri 18

LHC Physics

[Covarelli]

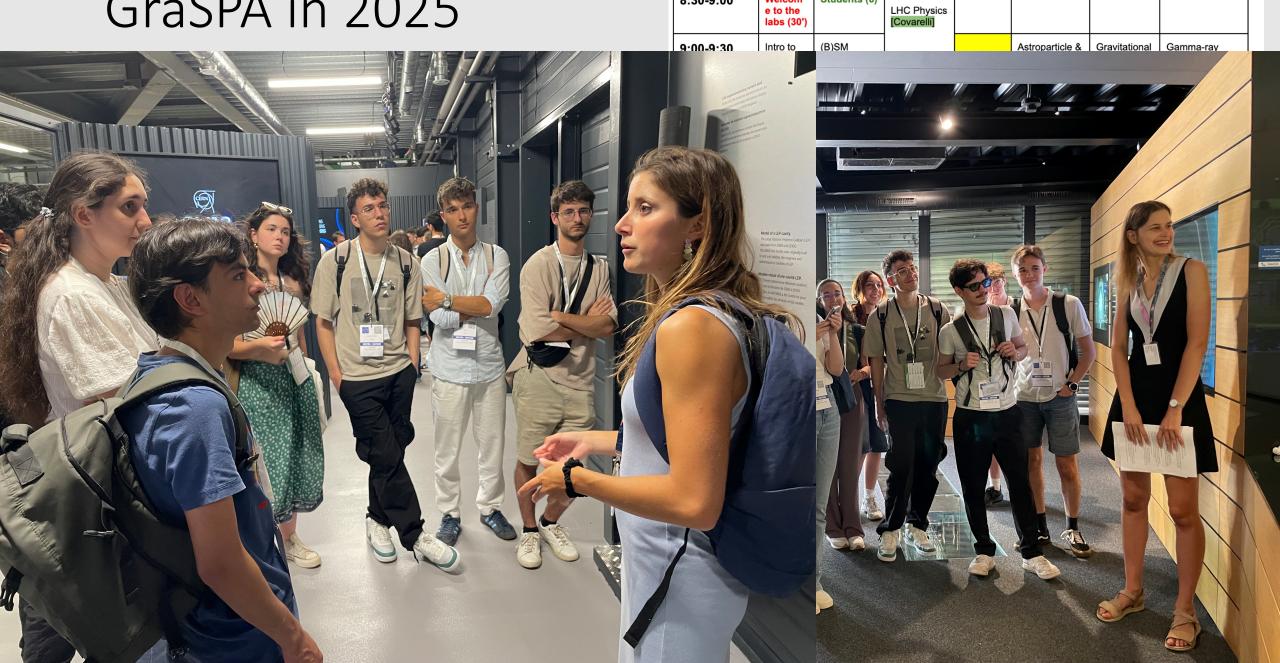
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GraSPA in 2025



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8:30-9:00

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Students (6)

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