EDUCATION COMMITTEE

Activity report 2022-2024

Committee Members

Rogerio Rosenfeld (UNESP-Br, ICTP-SAIFR), Susana Landau (UBA-Arg) Ana Luiza Sério (ICTP-SAIFR), Gabriel Bengochea (UBA-Arg), Martijn Mulders (CERN), Anamaría Font (UCV-Ven), Óscar Zapata (UdeA-Col).

Objectives

- Draw a plan of specific actions to promote the collaboration among different groups in the region working in HECAP in order to develop advanced training opportunities and to inspire young people into STEM fields.
- Expand the efforts on capacity building, such as the successful Latin American alliance for Capacity buildiNG in Advanced physics (LaCONGA physics).
- Foster R&D capabilities in key technologies across HECAP, enabling connections with industry, and with possible broader societal impact.
- Expand the efforts already conducted by ICTP-SAIFR to improve scientific education at the High School level through courses in Spanish and Portuguese directed to a network of teachers and also directly to high school students.
- Promote the dissemination of knowledge to the society through outreach activities.

MOU Alpha-Cen & LAA-HECAP



Alpha-Cen is a non-profit and non-governmental scientific group created for the development and strengthening of research in astronomical sciences in Central America and the Caribbean.

MOU Alpha-Cen & LAA-HECAP

Mentorship Program



This program pairs professional astronomers with undergrad students to help them grow in their science careers and set long term goals. The mentor-mentee relationship will help the student understand how astronomical research works world-wide.

MOU Alpha-Cen & LAA-HECAP

A memorandum of understanding was made between Alpha-Cen and LAA-HECAP for Alpha-Cen Mentorship Program.

Primary objectives

- 1. Stimulate interest in research.
- 2. Show students how research works in our field of interest.
- 3. Give them resources to find more information on research topics.
- 4. Guide them in the career-choosing process.

The Mentees are intended to be advanced undergraduate students in Physics or related areas in Latin America.

The Mentors will be Professors at Universities or postdocs in HECAP.

Commitment

- Mentors and mentees should meet a minimum of 1 hour per month.
- Mentors should fill a spreadsheet with the dates and duration of meetings.
- Mentors and mentees should participate in a common event every 6 months to meet other people in the program and change experiences.
- Mentors and mentees should sign a confidentiality agreement.

The first call of the LAA-HECAP mentoring program expected for 2025-1.

From LA-CoNGA physics to EL-BONGÓ physics

LA-CoNGA physics in a nutshell

- LA-CoNGA physics is an Erasmus+ project, CBHE category (Capacity Building in Higher Education)
 - 4-year EU funding: 900 k€, in the 2020-2023 period

Co-funded by the Erasmus+ Programme of the European Union



- Main objectives :
 - contribute to the modernization of higher education in the Andean region
 - build a network of common capacities in advanced training for 8 Universities
 - Colombia, Ecuador, Perú, Venezuela
 - strengthen collaboration between Latin America and Europe in Higher Education
 - with support of universities and research centers in Europe and Latin America
- Proof-of-concept : setup a Master-level complete year in Advanced Physics
 - common, cross-institutional program
 - inserted in the already-existing local Master programs
 - modern, interconnected instrumentation laboratories
 - innovative e-learning platform, fully based on open-access contents and tools
 - problem-solving pedagogical approach, structured in mini-modules
 - 3-month internships in research labs or industrial partners (in Europe or LA)
 - Syllabuses calibrated on the EU Bologna process (i.e. 60 ECTS = 1 full year)

LA-CoNGA physics

Slide taken from José Ocariz's Talk at LASF4RI meeting

From LA-CoNGA physics to EL-BONGÓ physics

1. NONGO

and after LA-CoNGA physics comes EL-BONGÓ physics

E-Latin american digital huB for OpeN Growing cOmmunities in physics :

- New proposal to the ERASMUS2027 STRAND-2
 - submitted in February 2024
 - we received the approval information in July 2024 !
 - funding : 800k€ requested, ~90% granted

E Mittan factor	Rosale	· · Proce blast. · · Head bas	····	Guiderice & Recom-	 Inertia 	9 4 4	
O My Parties Prolite		My Project(s)				e O mantant	
h My Organisation (c)		white a construction of the second se				A President	
🖗 Guerre		Results 2			4 Q. In		
Stationarity		ACRONYM +	10PC 8 -	PRODUMENT (HIGHET I IN	ACTOR -	
B By Property.		Later energiant Allowan for Dasaulty MoldPill In					
My Permat Restlements		Informati physics		171.00	21040 Au	Adre T	
· Multiment from		0.40400	Instant do. 200-000	Checkolant?	NY PAGE	Ame 1	
 Ma Experi Area 			STRATE C				
		infector prop. TI W		1.8.1		Manager CALIN	







ISUENA BIEN!



LA-CoNGA physics

Slide taken from José Ocariz's Talk at LASF4RI meeting

From LA-CoNGA physics to EL-BONGÓ physics



LA-CoNGA physics

Slide taken from José Ocariz's Talk at LASF4RI meeting

ISUENA BIEN!

New Committee Members

2024-2026:

- Reina Camacho-Toro (CNRS-Fr)
- Melissa Cruz-Torres (UNAH-Hon)
- Deywis Moreno (UAN-Col)
- Alma Gonzalez-Morales (UG-Mex)
- Rogerio Rosenfeld (UNESP-Br, ICTP-SAIFR)
- Ana Luiza Sério (ICTP-SAIFR)
- Martijn Mulders (CERN)
- Anamaría Font (UCV-Ven)
- Óscar Zapata (UdeA-Col)

Future actions

Identify funding sources for these activities, such as grants from international organizations or government agencies.

Encourage partnerships between Latin American institutions to share resources and expertise.

Utilize existing networks and regional collaborations to facilitate communication.

Keep emphasizing the importance of public engagement and educational activities to inspire future generations of scientists.

Regularly assess the impact of implemented activities and make adjustments as needed.

Thank you for your attention