

Strategies and Plans in Latin America

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On behalf of the Preparatory Group of the
Latin American Forum for Research Infrastructures on
High Energy, Cosmology and AstroParticles (HECAP)

Snowmass Community Planning Virtual Meeting – October 5-8, 2020

LASF4RI for HECAP

lasf4ri.org



Latin American Strategy Forum for Research Infrastructure
for High Energy, Cosmology and Astroparticles

Developing a strategy to strengthen Latin American Scientific Collaborations and their impact.

1st time a strategy process is conducted in LA

Timeline for LASF4RI

Brainstorming with the HEP community at the XI SILAFAE in Guatemala

Initial ideas

Nov.
2016

Ibero-American Ministerial Science and Technology meeting in Guatemala: mandate declaration

Mandate

Oct.
2018

National Meetings and formation of the Preparatory Group with delegates from 10 LA countries.

Preparatory Group

J/F/M
2019

Initial landscape

Two-page briefs of 18 experiments. Gathering support from national communities.

Town Hall

Town hall meeting at the XII SILAFAE in Peru to discuss mandate and next steps

Timeline for LASF4RI

1st LASF4RI Workshop and Meeting of the Preparatory Group at ICTP-SAIFR

LASF4RI Workshop & 1st Meeting of Preparatory Group

Deadline for the submission of White Papers to LASF4RI

White papers

Write-up of the Physics Briefing Book and the first version of the Strategy Document.

Documents write-up

May
2019

May/Jun
2019

Dec.
2019

July
2020

Sept.
2020

High-level Strategy Group

Definition of the composition of the High-level Strategy Group

Open Virtual Symposium

Open Virtual Symposium of LASF4RI for HECAP organized by ICTP-SAIFR, delayed from March due to the pandemic

Landscape in High Energy, Cosmology and AstroParticles (HECAP) in Latin America

~1,000 physicists in HECAP

AstroParticles/Cosmology

- ALPACA
- LAGO
- AUGER
- HAWC
- DarkSide
- DAMIC
- TOROS/ABRAS
- QUBIC
- BINGO
- LLAMA
- LSST
- ASTRI
- CTA
- SWGO
- SAGO

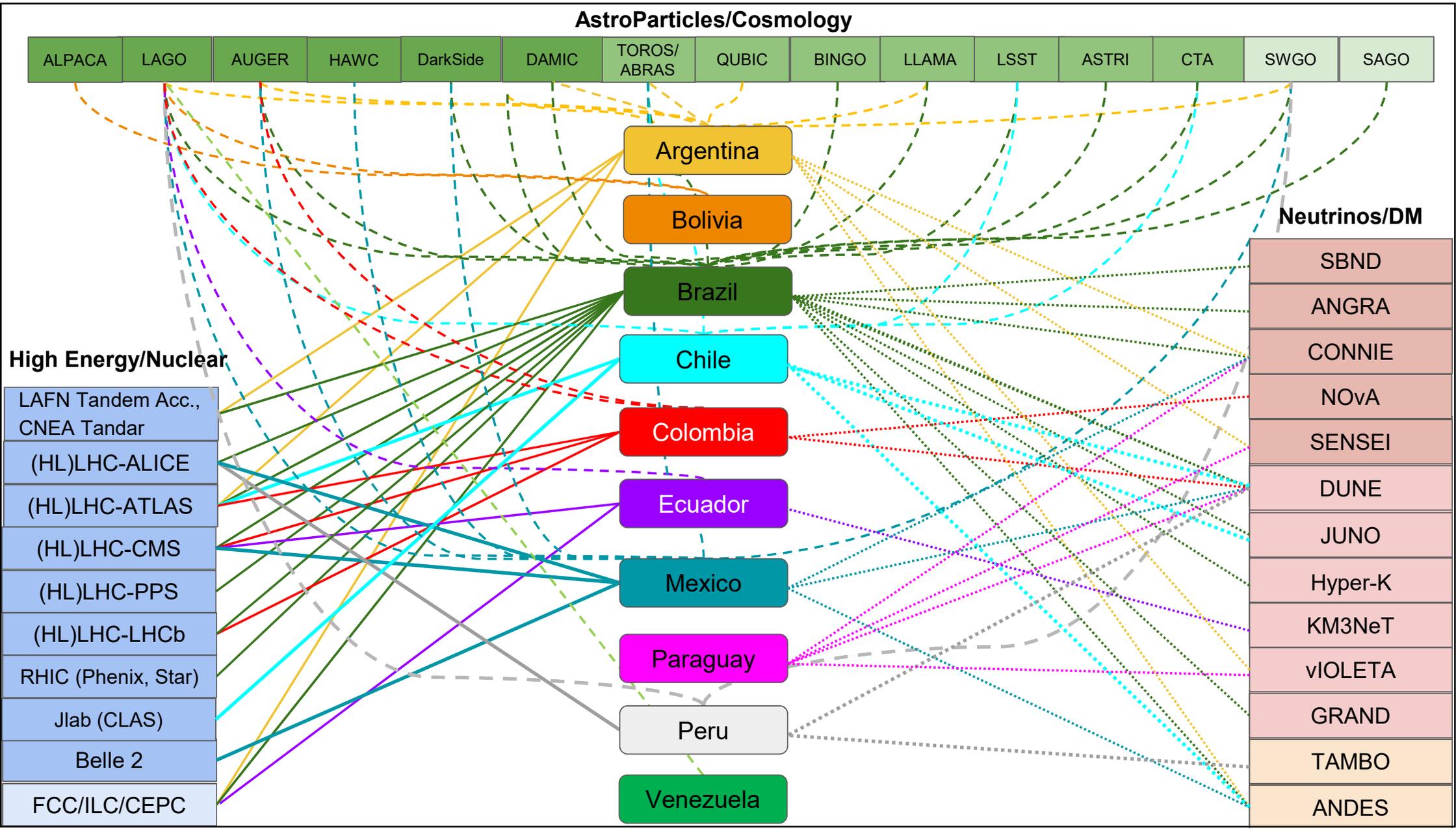
- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Ecuador
- Mexico
- Paraguay
- Peru
- Venezuela

Neutrinos/DM

- SBND
- ANGRA
- CONNIE
- NOvA
- SENSEI
- DUNE
- JUNO
- Hyper-K
- KM3NeT
- vIOLETA
- GRAND
- TAMBO
- ANDES

High Energy/Nuclear

- LAFN Tandem Acc., CNEA Tandar
- (HL)LHC-ALICE
- (HL)LHC-ATLAS
- (HL)LHC-CMS
- (HL)LHC-PPS
- (HL)LHC-LHCb
- RHIC (Phenix, Star)
- Jlab (CLAS)
- Belle 2
- FCC/ILC/CEPC



Latin American Strategy for
Research Infrastructures
for High Energy, Cosmology,
Astroparticle Physics
LASF4RI for HECAP

Based on ~40 submitted white papers

LATIN AMERICAN HECAP PHYSICS BRIEFING BOOK

Preparatory Group

Will be put in the arXives

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Few highlights (my personal picks):

- UHECR - Auger Observatory – success story in the region
- Novel technology for the detection of liquid argon scintillation light – Arapuca – adopted in DUNE
- Full development of a new front-end readout chip for two ALICE detectors
- Neutrino/DM detectors - skipper CCDs
- Southern Wide-field-of-view Gamma-ray Observatory (SWGGO) – recently formed collaboration
- Possibility of an underground facility in the region - ANDES

Latin American Strategy for Research Infrastructures for High Energy, Cosmology, Astroparticle Physics LASF4RI for HECAP

Strategy Document Committee

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Daniel de Florian – ICAS

LA representative to the Snowmass Advisory Group

Next steps:

Oct. 20 - Meeting of the High Level Strategy Group

Oct. 27 – Meeting of the Ibero-American Ministers of Science, Technology and Innovation

The screenshot shows a website page for the IV Reunión Ibero-americana de Ministros e Altas Autoridades de Ciência, Tecnologia e Inovação. The page features a header with navigation links: CIMEIRA, VISITE ANDORRA, CALENDÁRIO, PRESSIONE, CONTATO, and a language selector for ESP. The main content area includes a large image of a meeting with the text: "IV Reunião Ibero-americana de Ministros e Altas Autoridades de Ciência, Tecnologia e Inovação" and "27 de outubro de 2020". Below the image, there are three sections: "Temático" (IV Reunião Ibero-americana de Ministros e Altas Autoridades de Ciência, Tecnologia e Inovação), "Encontro" (15-16 de outubro de 2020), and "Responsável / Suporte" (ANDORRA).