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## LA-CoNGA physics: an open science education collaboration between Latin America and Europe for High Energy Physics

Saturday, 9 July 2022 14:45 (15 minutes)

The communities of astrophysics, astronomers and high energy physicists have been pioneers in establishing Virtual Research and Learning Networks (VRLCs)[1] generating international productive consortiums in virtual research environments and forming the new generation of scientists. In this talk we will discuss one in particular: LA-CoNGA Physics (Latin American alliance for Capacity buildiNG in Advance physics) [2].

LA-CoNGA physics aim to support the modernization of the university infrastructure and the pedagogical offer in advanced physics in four Latin American countries: Colombia, Ecuador, Peru and Venezuela. This virtual teaching and research network is composed of 3 partner universities in Europe and 8 in Latin America, high-level scientific partners (CEA, CERN, CNRS, DESY, ICTP), and several academic and industrial partners. The project is co-funded by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Commission.

Open Science education and Open Data are at the heart of our operations. In practice LA-CoNGA physics has created a set of postgraduate courses in Advanced Physics (high energy physics and complex systems) that are common and inter-institutional, supported by the installation of interconnected instrumentation laboratories and an open e-learning platform. This program is inserted as a specialization in the Physics masters of the 8 Latinamerican partners in Colombia, Ecuador, Peru and Venezuela. It is based on three pillars: courses in high energy physics theory/phenomenology, data science and instrumentation.

In the current context, VRLCs and e-learning platforms are contributing to solve challenges, such as distance education during the COVID19 pandemic.

- $[1] \ http://www.oecd.org/sti/inno/international-distributed-research-infrastructures.pdf$
- [2] http://laconga.redclara.net

## In-person participation

No

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