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## Erasmus Synergies in the Andes and Beyond: Training Multimessenger Astronomers through LA-CoNGA & EL-BONGÓ

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LA-CoNGA physics (Erasmus+ 2019-23) validated a Bologna-aligned, one-year master's curriculum that merges data science, scientific instrumentation and high-energy physics to modernise graduate education across the Andean region. Eight universities pooled more than 200 open Spanish-language resources and eight remotely operable HEP laboratories via RedCLARA, enabling three cohorts to keep learning seamlessly during the pandemic. The initiative also advanced gender equity, open science practices, and collaborations with CERN, demonstrating that small and medium-sized institutions can excel when they share hardware, software, and teaching expertise.

EL-BONGÓ physics (Erasmus+ 2025-28) scales the concept geographically and disciplinarily. Twelve Central American and Andean partners will weave four Research and learning Communities—High-Energy Physics, Multimessenger Astronomy, Seismology and Earth Hazards, and AI and computational Tools—into a federated Digital Science Hub. FABLabs nurture open-hardware skills, blockchain certificates secure the portability of new 16-hour, 3-ECTS micro-modules, and citizen-science hackathons keep the ecosystem outward-facing. For Astro-COLIBRI, which disseminates rapid alerts on extreme cosmic phenomena, the synergy is immediate. LA-CoNGA provides a tested pedagogical backbone and culture of reproducibility. At the same time, EL-BONGÓ's multimessenger-astronomy cluster, partnered with the Latin American Giant Observatory, offers real-time data streams, open-source pipelines, and a ready network of early-career scientists. Together, the two Erasmus projects outline a repeatable roadmap for educating, equipping, and connecting the next generation of astronomers who will not only utilise Astro-COLIBRI alerts but also enhance them, fostering a truly borderless, inclusive approach to multi-messenger discovery.

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