EDITORIAL

Scientific collaboration, defined as the joint research and participation of authors and institutions, both local and internationally, remains a pervasive and essential feature across Latin America. Today, knowledge production is increasingly collaborative and multidisciplinary in nature. According to international collaboration indicators, such as those provided by the SCImago Journal Rank (SJR), over 40 % of scientific publications in all fields across Latin America involve co-authorship with researchers or institutions from one or more other countries. A brief survey of specific disciplines reveals even higher levels of international collaboration in 2024: over 55 % in Physics and Astronomy, more than 46 % in Materials Science, over 58 % in Earth and Planetary Sciences, and upwards of 44 % in the area of Energy. In each of these fields, collaboration rates have shown a steady upward trend throughout the 21st century. Additionally, approximately 60 % of scientific articles in Latin America are published in open access journals, significantly enhancing their accessibility and visibility. Notably, over 80 % of the region's scientific output is concentrated in just four countries: Brazil, Mexico, Chile, and Argentina.

It is widely recognized that Latin America generates a substantial volume of scientific research and fosters strong collaborative efforts, much of which remains underrepresented in international rankings despite its importance. A considerable portion of this work can be classified as applied science, aimed at addressing specific national or regional challenges. Additionally, basic science is vigorously pursued, with the potential to make valuable contributions to the global body of knowledge. Unfortunately, the dissemination and visibility of much of this research remains limited, particularly in countries where the infrastructure for managing science, technology, and innovation is weak or absent. Although numerous platforms and channels exist for disseminating scientific work, these resources need to be more actively used and strengthened in coordination with policymakers, research institutions, and scientists to boost dissemination opportunities while ensuring the quality and integrity of the research. In this context, the Bolivian Journal of Physics remains committed to ongoing renewal and development, with the goal of supporting and amplifying the visibility of scientific contributions both regionally and globally.

Within the framework described in the preceding paragraphs, we are pleased to present to our distinguished readers Revista Boliviana de Física, Issue No. 44, featuring three peer-reviewed articles that exemplify multidisciplinary and collaborative research.

The first article, "Opinion Dynamics in Multilayer Social Networks" by Lino-Blacutt & Ramírez-Ávila (2024), explores an emerging interdisciplinary field known as sociophysics. The authors present a novel study of multilayer social networks, analyzing the evolution of individual opinions through a discrete dynamical model. This work contributes to our understanding of collective behavior in complex social systems.

The second article, "Structural and Microstructural Study of Archaeological White Pigments from the Moche Society (200–750/800 A.D.) by X-Ray Diffraction and Rietveld Refinement" by Zeballos-Velásquez et al. (2024), is the result of collaboration between researchers at the Universidad Nacional Mayor de San Marcos (Peru) and the University of Florida (USA). The study presents a detailed structural analysis of mural paintings and pigments from the Pampa la Cruz archaeological complex, located on the northern coast of Peru. The authors describe in depth the application of X-ray diffraction techniques and the Rietveld refinement method in their investigation.

In the third article "QSO Spectral Composition and Mean Spectrum of Quasars in SDSS", Lázaro & Rodríguez (2024) present a composite mean spectrum based on the complete set of quasars from the DR16Q catalog. According to the authors, the reported mean spectrum currently represents one of the most extensive composite spectra in terms of the number of quasars included.

Once again, we hope this issue is of interest to our readers, and we warmly invite you to consider submitting your next manuscript to the Revista Boliviana de Física.

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