

EDITORIAL

Despite recent difficulties encountered in maintaining the continuity of the Revista Boliviana de Física (RBF), we are pleased to announce that the RBF continues to nourish itself with scientific work from the Universidad Mayor de San Andrés (UMSA) and other institutions involved in research such as the Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) and Chaco S.A.

In this new issue of the RBF, now in its number 34 and in its 24th year of uninterrupted publication and review, three scientific articles submitted to international review are presented. The theoretical physics group of UMSA contributes with two papers, while the oil and gas companies mentioned above present one paper. Also, within this issue of the RBF, an outstanding student from UMSA provides a historical review.

This number 34 of the RBF, opens with an article by Iglesias & Ramírez-Ávila (2019) on the synchronization of trios of neurons in the possible configurations connected to three node patterns, as part of a natural continuation of previous works on the theme by Ramírez-Ávila *et al.* (2015) and Calderón de la Barca & Ramírez-Ávila (2017). In this study the authors report that synchronization is improved for the less homogeneous case, in addition they show the existence of multi-stability for the Rulkov neuron model.

In the second article Lázaro & Bejarano (2019) use multiresolution analysis techniques (AMR) to detect the k -anomalies, where there is a relationship with long wavelength geological structures that contain hydrocarbons. Previous results are confirmed with experimental techniques and show a good correlation with the AMR analysis. Finally, the authors show the wealth of information that these spectral techniques can provide on seismic data.

The closing article corresponds to the work of Condori & Sanjinés (2019) who, using Lagrangian formalism study the elastic pendulum with two degrees of freedom, in which they estimate the regions of stability without invoking small oscillations.

Finally, the “History of Science” course taught by Dr. Diego Sanjinés, has inspired a number of historical reviews including a concept of time by Aramayo (2004) and now Einstein and the relativity theory by Lozada-Gobilard (2019). This work consists of a translation from German of texts from the book edited by Israël *et al.* (1931) including critical texts and in particular that of Jean-Marie le Roux who refers to Einstein’s Relativity theory. Apart from the translation of the document, the author makes relevant comments that lead to a better understanding of the text and its implications.

We hope that the content of this issue of the RBF is to your liking and can motivate the reader to further the works exhibited through these pages. We also invite the scientific community to send their work to be published in the RBF.

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