

A BRIEF HISTORICAL MOTIVATION

We are pleased to launch for the general public, in particular those with interests in teaching, history and outreach of Astronomy, the first issue of the *Latin-American Journal of Astronomy Education* (RELEA).

Scientific education has received growing attention due to the presence of scientific and technical elements in our lives, and a less-than-satisfactory knowledge basis of people in these matters, certainly less than necessary for a proper exercise of citizenship.

This situation has caused a lot of concern among educators and scientific researchers, and triggered several initiatives to try to improve the situation.

Today's challenge is to begin to revert this situation of scientific illiteracy, albeit without committing the mistake, longly present in that educational sector, of atomizing and elitizing the several domains of science and take apart the humanities from exact and natural sciences. The scientific education that is lacking is the one that admits a basic essential education in humanistic disciplines, thus favoring a reapproach of scientific and humanistic cultures.

Inspired by these facts and based on their own experiences of several years devoted to the teaching and popularization of astronomy in various levels, a group of professional astronomers has decided to create the RELEA.

Other factors that have contributed to launch this new Journal include the existence of an international effort related to Astronomy Education. There exist in several continents associations and related publications specifically dealing with these matters. However, there are no specific publications in this area which merge the experiences and proposals from Latin-American countries. Thus, we had to join efforts to fulfill this gap, which resulted in the creation of the RELEA in the second semester of 2003, with its first issue now launched.

Thus, the Journal will be a forum for the publication of papers in Astronomy Education, and will show mainly, but not exclusively, the work of latin-american countries in this area. The Journal target is a readership of educators and researchers interested in Astronomy Education, teachers of all levels and interested people in general. It also pretends to boost the development of research in Astronomy Education, which are still scarce in Brazil and latin-american countries in general.

The RELEA does not represent and does not have any link or relationship, either explicit or implicit, with any scientific or educational society. The contents and management of the RELEA are therefore an exclusive responsibility of the Editors and Editorial Board.

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In this first issue five articles are published on a variety of topics.

In the article *La enseñanza/aprendizaje del modelo Sol-Tierra. Análisis de la situación actual y propuesta de mejora para los futuros profesores de primaria*, the author

presents a briefing of his Ph.D. Thesis worked out in Spain. The focus is on the relationship between the research of ideas, reasoning and difficulties of future teachers and the learning approach to the Sun-Earth model, which permits an explanation of the day-night and seasons.

A teaching-learning experience on a relevant and always timely topic in Astronomy Education is discussed in the article *Física e arte nas estações do ano*. In this work the authors describe their practice of approaching the scientific knowledge through artistic concepts as a starting point for motivation, reporting the results of a outreach activity executed at the Museu de Astronomia e Ciências Afins, Rio de Janeiro (Brazil). Besides of this, they present results of comparative studies of the concepts of students and teachers on this matter.

In *Learning from attitudes*, the author presents three situations occurred when in Holland, working on his Ph.D. Thesis, in which the attitudes of Prof. Hugo van Woerden, coordinator of the Kapteyn Laboratory, are focused.

In the article *Radioastronomía: una mirada más amplia*, the basic principles of Radio Astronomy are exposed in a simple way, with relevant observations and information for further use in the classroom.

Finally, the article *O universo das sociedades numa perspectiva relativa: Exercícios de etnoastronomia*, discusses an experiment on scientific outreach developed by the authors in the Planetário do Pará (Belém, Brazil). The report on workshops promoting the popularization of Ethnoastronomy, spreading out values punctuated by tolerance and cultural diversity and the need of harmonic relationship between human beings and the environment. Several ideas about the origin of the Universe are shown, and also some constellations created along history, particularly some by brazilian indigenous cultures.

We would like to stress that the RELEA supported the event *Santa Clara 2004 - I International Workshop on Gravitation and Cosmology*, held from May 31st until June 3rd, 2004, at the *Universidad Central de Las Villas*, Santa Clara, Cuba, through the participation of one of the Editors (J.E.H.) in the Organizing Committee.

Local participants succeeded in making an international event attended by several foreign specialists, totalizing about 50 people. This number could not be higher because of considerable difficulties posed by the Foreign Affairs services of some countries to issue travel documentation, a procedure always justified by the existence of a difficult international situation. The Organizers and participants alike would have preferred another attitude, with a more favorable outcome.

According to our cultural, social and educational scope, our support to the activities of that *Workshop*, which have been growing significantly in Cuba and other countries, contributed substantially to its success.

We would like to ask your help to announce the launch of this journal to whom it may concern, and invite everybody to submit their papers on the covered subjects. More information about the RELEA can be found at the link : www.iscafaculdades.com.br/relea. The articles may be written in Portuguese, Spanish or English.

Our acknowledges to the Director and staff of the ISCA, the authors of the articles, the referees and all those whom, directly or indirectly, have helped us to materialize this initiative, in particular with the production and edition of this first issue.

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