## **Editorial**

This fifth number of the Latin American Journal of Education in Astronomy (RELEA) features just two articles.

In the previous Editorial we stressed that the number of submissions had increased. Until now, this higher number trend holds. Other articles are in the peer review processes, and those approved will be published in the following number still this year. However, we decided to publish immediately the present articles with completed peer review - even if, in this date, they are not many - to imprint a new periodicity to the Journal.

Brazil will host the International Astronomical Union Assembly and satellite Meetings in 2009, declared by the UNESCO the International Year of Astronomy. The RELEA pretends to benefit from of the general mobilization that these events will produce, to focus on more specific and important educational questions, not always properly addressed in the events of this nature.

In particular, the form that the RELEA intends to act and to contribute during these events will be mainly through the promotion of the improvement of the quality of world-wide astronomical education. We aim to do that by intensifying the international spreading of the work in the area performed in Latin America and offering a differentiated incentive, so that more educators and researchers can reflect about and discuss the problems and perspectives in education in astronomy and publish their works in the area, thus contributing to the badly needed development in this area.

Another change that we made was the relocation of the electronic management of the RELEA to a new site. Although during this rearrangement eventual glitches in the access to the page of the Journal could occur, these would be of short duration and should not cause great inconveniencies. We thank the understanding of those who access the Journal during this period. Please, communicate us any inconvenience or difficulty, immediately. The new address of the RELEA is:

## www.astro.iag.usp.br/~foton/relea/index.html

This is an address of the University of São Paulo (USP). The relocation of the site of the RELEA to this address is due the operational needs of the Journal and to the contribution of this server in receiving the site of the Journal - in particular because one of Editors (JEH) is a professor at the USP. However, this does not mean any change in the independent character of the RELEA in relation to this or any other institution.

In this number we feature the following works:

The teaching of astronomy in Uruguay, by Reina Pintos Ganón and Julio Angel Fernández. This work contributes to the studies on the history of the education of astronomy in Latin America, an important area quite devoid of studies and publications. The authors analyze the Uruguayan case – the former, however, shows several similarities with what happened historically in this area in Brazil and other countries in the region. Ganón and Angel identify the influence of the positivist thinking in the academic environments, particularly in the last quarter of the XIX century, and discuss the consequences for the curricular composition of similar courses and in the education of astronomy. They also address the creation of astronomical observatories and the education of astronomy in the high-school level. In the latter, the French influence made itself particularly present in the planning of disciplines of Cosmography, in the end of XIX and beginning of XX century XX, and in the texts produced for its teaching. The emphasis, in general, at the time, a fact that also occurred

in Brazil, was in astronomy of position and measure of the time. The analyses and discussions of the authors extend until the current days, remarking the relative advancement of Uruguay in this area, foreseen to be incorporated in the currently projected reform of the university.

We would like to remark that it would be very timely if other works with this aim were performed for the other countries of Latin America. We encourage other authors to undertake this task. If on the one hand, a good part of these countries arise in this beginning of millennium as important contributors to the international astronomical research, on the other hand, the education in astronomy in the respective societies of these countries usually does not follow these advances and, in general, leaves quite a lot to desire. Works on the history of the astronomy education would contribute to improve the steps in this direction.

Alternative Conceptions of High-School Students on the Phenomenon of Formation of the Phases of the Moon, by Gustavo Iachel, Rodolfo Langhi and Rosa Maria Fernandes Scalvi. In this article the authors carry through a research on alternative conceptions in astronomy, extending it for students of the high-school level. In principle, if the directions of the National Curricular Parameters for Teaching of Sciences at the elementary level were followed with pedagogical success, phenomena such as the formation of the phases of the Moon or of the eclipses, for example, would not have to present the conceptual difficulties that, according to the results obtained by the authors, continue to exist. The approach of the authors to explain the phenomena is still supported in the use of graphs (drawings) of the Earth-Moon system. (These graphs, however, in our view, present by themselves serious conceptual and epistemological difficulties that have not been addressed in literature, even for use in high-school education.) The conclusions of the work alert for the deficiency of the formation in those subjects and the necessity of development of new pedagogical methods. The literature cited to the end points to some of these possible methods, yet those still do not help to improve the graphical representation mentality (even when made in three dimensions) as the main - and, in general, exclusive - source for the process of teaching of these subjects. The work represents an advance for extending and bringing up to date the several surveys of the alternative conceptions on those phenomena made in last twenty years.

More information on the Journal and instructions for authors can be found in the <u>new</u> address: <u>www.astro.iag.usp.br/~foton/relea/index.html</u>. The articles can be written in Portuguese, Spanish or English.

We thank Mr. Felipe de Miranda e Souza and Mrs. Rosemeire Zambini for their help with the edition of articles, the authors, the referees and all those that, directly or indirectly, have assisted us in the continuity of this initiative and, in particular, in the elaboration of the present edition.

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