

Editorial

This 17th number of the Latin-American Journal of Astronomy Education (RELEA) carries an important notice for Astronomy Education in Brazil and abroad.

The *III Simpósio Nacional de Educação em Astronomia* (SNEA III) (National Symposium on Astronomy Education) will be held on 21-24 October at the Universidade Tecnológica Federal do Paraná – Headquarters, in the city of Curitiba, PR.

Just as the I and II SNEAs, held respectively in Rio de Janeiro and São Paulo, the event aim is to bring together researchers in Astronomy Education, with the purpose of discussing the research work carried out and address general issues of interest. Scheduled activities are: lectures, panel discussions, presentation and discussion of research papers, courses and workshops for teachers.

Further information for teachers, authors and interested parties in general are available at: <http://www.sab-astro.org.br/IIISNEA>.

Due to the participation of one of us (PSB) in Scientific Committee, we have information that about 167 papers were submitted, which already demonstrates the success of the event, seeking its consolidation.

Of the five articles in this issue, three of them are from foreign authors, which reinforces the importance of RELEA in the international context. The submission of these works can be partially linked to the recent closure of the journal *Astronomy Education Review* which had been published since 2001. Even if a discussion about the reasons that led the editors of that publication to cease its publication is out of scope here, we regret the decision and hope that other publications may soon fill the gap, not only in the North American context, but also in other regions of the globe. Anyway, hopefully the RELEA continue to fulfill its role to publish the research produced, not only in Latin America, but also available for authors worldwide.

In this issue we have five articles:

Mixed-methods study that examines nine science teachers' perceptions of SLOOH robotic telescope for astronomy teaching, by Daniel C. Gershun, Timothy F. Slater and Katie J. Berryhill. This study investigates the use of robotic telescopes Slooh to teach astronomy and its perception by science teachers. Data was collected during two weeks of an online course on robotic telescopes. While the pre and post tests did not reveal a statistically significant gain in knowledge of astronomy, the qualitative data analysis reveals the most important aspects according to participants. The analysis of these issues suggests that Slooh can provide an interactive and social learning incorporating interdisciplinary themes.

Essays on Eclipses, Transits and Occultations the Teaching Tools in the Introductory College Astronomy Course, by Noella L. Dcruz. This paper presents a study of an introductory college course for students of non-scientific careers. As teaching tools, tests on eclipses, transits and occultations containing descriptive and conceptual pieces have been proposed. The analysis of the activities indicated that students found difficult the conceptual aspects. This leads to a proposal of previous activities to help students write the essays.

Liberar al globo terráqueo (Free the globe), by Alejandro Gangui. This paper describes the parallel globe as a teaching tool, its basic fundamentals of construction and

operation. Some activities that facilitate its use in classes and teacher training workshops are also suggested.

O lado escuro da Lua nunca apanha sol? (Is the dark side of the moon ever illuminated by the sun?), by Odilon Giovannini, Daiana Pellenz and Francisco Catelli. This paper presents the development of an answer to the title question. Initial conceptions of the students are considered and a didactic model of the Earth - Moon - Sun system proposed, and it is reported its application to elementary school students. Initial conceptions presented in the literature and the questions posed by the students in applying the model provide evidence that there has been a significant learning.

Evolução dos conceitos de astronomia no decorrer da educação básica (Evolution of the astronomy concepts along basic education cycle), by Luiz Marcelo Darroz, Cleci Werner Rose, Alvaro Becker Rose and Carlos Samudio Ariel Perez. This paper presents a survey of ninth-grade students of elementary school and the third grade of secondary education in the area of Passo Fundo / RS. Through a questionnaire, the authors investigated the students' knowledge of basic terms and astronomical phenomena, and their change as they advance in grade levels. As a result, the rate of correct answers are similar in the responses of students of elementary and secondary level, revealing that many misconceptions remain throughout basic education and that such issues are not or are little discussed. The authors conclude that the discussion of concepts related to astronomy should receive greater emphasis and it is needed an action at the national level.

More information about the Journal and Instructions to authors are listed in the address: www.relea.ufscar.br. Articles may be written in Portuguese, Spanish or English.

We thank Mr. Walison Aparecido de Oliveira for editing the articles, the associate editors, the authors, the referees and all those who directly or indirectly helped us to continue this initiative and, in particular, to prepare this issue.

Editors

Paul S. Bretones

Luiz C. Jafelice

Jorge E. Horvath