Astronomy at *Ediciones Akal*: from public outreach to the university

David Galadí-Enríquez¹ and Elvira de Miguel²

- ¹ Centro Astronómico Hispano Alemán, Apartado 2010, E-04080-Almería (Spain)
- ² Ediciones Akal, Sector Foresta 1, E-28760-Tres Cantos (Spain)

Abstract

Astronomy, as a professional activity, has to cover three fields: research, education, and communication. The Spanish publisher *Ediciones Akal* has built during the last years, a book series on astronomy that extends into those three fields and that is finding its place in the Spanish panorama of scientific publications.

1 Introduction

Astronomy as a scientific professional pursue has to cover three mandatory fields: research, education and communication. All three fields have to be driven together, but not necessarily all professional astronomers have to devote part of their time to all these activities. Obviously, research is the main field, the matter astronomy is made of. Education is a need arising from the finite character of human life: every generation has to pass the baton on to the next. This activity is developed, mainly, at universities, but also to some extent at most research institutions. Communication is an activity required by the need to revert the knowledge gathered by science on the society that is funding it. Also, clever communication policies make the general public more prone to support funding for certain activities of basic research.

Any publisher willing to develop a book series on astronomy has to keep in mind these three dimensions of any scientific activity, and decide which of these fields are going to be covered by their collections.

2 Astronomy publishing in Spain and of books in Spanish

There is a significant difference among publishing books for astronomy and for any other natural science: astronomy has an army of amateur practitioners, practically absent in other sciences, that need a specific treatment and very concrete kinds of products. We will refer to this general class of books as 'practical astronomy'. Other kinds of astronomy books could be gathered under the label "classical" or "theoretical astronomy" but, following the tradition initiated by Flammarion [6], we will refer to this line as "popular astronomy". Of course, this fact applies to astronomy publishing worldwide.

The Spanish panorama of astronomical publications is dominated by translations, mostly from English. Indeed, all best seller books on astronomy in Spanish are, without exception, translated works from foreign languages. Also, the market of astronomy books in Spanish devotes most of its titles to the classical or theoretical, popular astronomy line.

Thus, the editorial challenge in this field consists of:

- Covering both the theoretical and practical branches of astronomy.
- Taking profit of the (possibly temporary) hole still present in practical astronomy.
- Making prudent advances towards producing books originally written in Spanish.

3 Practical astronomy

Many kinds of books could be considered under this label, but several specific fields can be identified very easily, all of them coming from the needs of the modern practical observer: sky atlases, general observation, specialized observation, and instrumentation. The Akal astronomy series is trying to fill these niches. As examples we could mention the sky atlas prepared by [5], including the cartographic contributions of the specialists Will Tirion and Antonín Rükl (for the Moon maps). Several books cover the general observation category, as [7] or [8]. Specialized observation is represented by the book on solar observation by [10]. The instrumentation side is covered by books on telescopes [3] or on specific techniques [4].

4 Popular astronomy

It is much more difficult to systematize the contents and themes of this kind of books. Referring to difficulty level, we could distinguish among light, medium and advanced works. Further distinctions more related to contents would lead to a complex and necessarily incomplete classification. Some of the most successful books of Akal astronomy series belong to the popular astronomy group, as [1] or [12]. Here we find books addressed to a young public, objectual (visual, image-based) works produced by world-leading astrophotographers, or books on specific subjects such as solar-terrestrial physics, cosmology, the Solar System, history of astronomy or astrobiology. The hottest topics in modern astronomy are also present, e.g. extrasolar planets [11].

5 New challenges: Spanish originals and academic books

Two of the most risky adventures in this series refer to the publication of original books in Spanish. Also, one of them belong to the field of academic books, addressed to university students that, up to now, have had most of their usual reference books in foreign languages. The book by [9] covers the new subject of astrobiology for the general public, while the highest level academic book on cosmology by [2] is to be used by physics students at the last years of their undergraduate studies and, also, at the graduate level.

6 Conclusion

The book series on astronomy by Ediciones Akal arose from the original astronomy collection started more than seven years ago by the Iberian Branch of Cambridge University Press, and now it is growing to cover all the relevant fields of this editorial area. Both translations and original works in Spanish are being included. Also, practical astronomy, popular astronomy and academic books are present in this series. Suggestions on new possible titles are welcome, mainly if they refer to possibly successful academic books, and works written originally in Spanish. The complete catalogue of this collection can be accessed from Ed. Akal web pages.

Acknowledgments

Ediciones Akal is very grateful to the SEA for having allowed them to act as sponsors of this 9th scientific meeting and for giving them the opportunity to communicate the work already done, and the future prospects, of the Akal book series on astronomy in Spanish.

References

- [1] Altschuler, D. R. 2004, Hijos de las estrellas, Akal
- [2] Cepa, J. 2007, Cosmología física, Akal
- [3] Covington, M. A. 2005, Telescopios modernos para aficionados, Akal
- [4] Covington, M. A. 2009, Astrofotografía con cámaras reflex digitales, Akal
- [5] Dunlop, S., Tirion, W., & Rükl, A. 2007, Atlas del cielo nocturne, Akal
- [6] Flammarion, C. 1880, Astronomie populaire, description générale du ciel
- [7] Henarejos, Ph. 2008, Guía de astronomía, Akal
- [8] Heifetz, M. D., & Tirion, W. 2008, Un paseo por las estrellas, Akal
- [9] Luque Serrano, B. et al. 2009, Astrobiología: un puente entre el Big Bang y la vida, Akal
- [10] Macdonald, L. 2006, Cómo observer el Sol de forma segura, Akal
- [11] Mayor, M., & Frei, P. Y. 2006, Los nuevos mundos del cosmos: en busca de exoplanetas, Akal
- [12] Sparrow, G. 2007, Guía turística del Sistema Solar: vacaciones de temporada y escapadas cortas en nuestro vecindario cósmico, Akal