

Preface

The *Astronomy & Astrophysics* (A&A) Board of Directors and EDP Sciences, the Publisher of A&A, decided in 2007 to organize a School on the various aspects of scientific writing and publishing, with two aims: (a) to teach young PhD students how to express their scientific thoughts and results through adequate and efficient written communication, and (b) to discuss the operation of A&A as an example of an international peer-reviewed journal in astronomy. To this end, a first SCIENTIFIC WRITING FOR YOUNG ASTRONOMERS (SWYA) School was organized in 2008, and a second one in 2009. The Schools were financed by A&A and by EDP Sciences, who also provided all logistic support.

This book contains a collection of articles aimed at supplying guidelines to PhD students and postdoctoral fellows to help them compose and publish scientific articles. Several articles present examples and case studies specially prepared for these Schools. The organization of this Volume, though not a faithful record of the lectures, closely reflects the structure of the Schools, and contains articles about the editorial office and the Editors, the Publisher, the business models in journal publishing, the journal *Astronomy & Astrophysics*, the refereeing process, bibliometric databases, and library services. The second Volume deals with the writing process, communication with graphics, bibliometry and ethics.

The first three articles of this Volume are presented by Editors – past and present – of A&A. The first article starts with a brief historical introduction, followed by a review of the scope, editorial process, and production organization of A&A, including the economic model of the Journal, and some current issues in scientific publishing. This article is immediately followed by a paper on the history of A&A, by one of the first Editors-in-Chief of the Journal. Then follows a chapter that explains the functioning of scientific journals from the editorial side of the process, with emphasis on the interaction between the three parties: the author(s), the Editors, and the referees. The chapter explains how manuscript evaluation proceeds, its advantages, pitfalls, and criteria – scientific, archival, and ethical – and how the procedures have evolved historically and consensually.

Then follows an article on the role of the Publisher, describing the various facets of the publishing activity, including the daily work of a dedicated team of professionals that guarantees the timely production of this international weekly astronomy journal.

Two articles deal with language editing: the first reviews the general advantages of editing the English expression, and describes both the aims of this effort and its place in the full publication process. That article is followed by a detailed Guide to language editing that serves as a reference for any non-native user of the English language.

The remainder of this Volume is dedicated to technical support in the broadest sense, portrays astronomy libraries as a tool, and describes the support by the databases at the *Centre de Données astronomiques de Strasbourg* (CDS). Special attention is given to the two most important information tools in astronomy: the *NASA Astrophysics Data System* (ADS) and the arXiv e-print server, in addition to an introduction to bibliometric studies. The last article describes how published data find their way to the CDS databases, and focuses on the strategy that ensures a high level of quality.

The Schools took place in Hotel and Conference Center Aazaert in the city of Blankenberge on the North Sea coast of Belgium. The meetings were very rewarding, and happened in a very pleasant atmosphere, thanks to the dedication and professionalism of the complete staff: from the barkeeper to the waiters, and from the administrative staff to the chefs in the kitchen – they all contributed greatly towards making us feel at home and have an unforgettable time. In the name of all participants, I express deep appreciation to Mr. Peter Kamoen, Manager of Hotel Aazaert, and to his entire staff.

The Manager of the Schools (on behalf of EDP) was Mrs. Isabelle Turpin, assisted by Mrs. Aurélie Chastaingt. They did a professional job preparing each event, and their presence during the duration of each School was a blessing for anyone who needed help. In the name of all lecturers and students, I extend a warm thanks to Isabelle and to Aurélie.

Dr. Agnès Henri, Mrs. Sophie Hosotte, Mrs. Isabelle Houlbert and Mrs. Marie-Louise Chaix (EDP) are given thanks for their efficient communication and helpful support during the preparation of this Volume.

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