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# Under One Sky: The IAU Centenary Symposium

*Edited by*

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# UNDER ONE SKY: THE IAU CENTENARY SYMPOSIUM

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OF THE INTERNATIONAL ASTRONOMICAL  
UNION HELD IN VIENNA, AUSTRIA  
28–31 AUGUST, 2018

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## Preface

IAU Symposium No. 349, *Under One Sky*, is the IAU centenary symposium, which was held during the XXXth General Assembly in Vienna, 28–31 August 2018. The Vienna General Assembly actually occurred about 11 months before the official centenary, as the IAU was founded in July 1919 in Brussels, by the *International Research Council*, shortly after the conclusion of the Great War. However, the Executive Committee deemed that a symposium to mark the centenary was entirely appropriate, given that so many astronomers (in fact over three thousand) were to be in Vienna at that time. Other shorter but geographically more widespread celebrations were to be organized in 2019, during the centenary year itself.

The IAU and its history are the main topics covered by this symposium. It was not so much a celebration, but more an opportunity to reflect on what had been achieved, or in a few instances, on what had not been so successful, and to have a vision of what might be in store for the future. Indeed, this last theme was a very opportune one, given the recent publication of the IAU Strategic Plan 2020–30, which was approved at the General Assembly.

Part of the symposium entailed reminiscences of past Presidents and General Secretaries of the Union, who reflected on some of the broader issues they dealt with while in office. All living past presidents and general secretaries were invited to contribute, and four of the former and eight of the latter did so and have papers published in this volume. A few (including Jean-Claude Pecker, General Secretary 1964–67 and Norio Kaifu, President 2012–15) presented their talks by pre-recorded video.

There were two invited plenary talks given at the symposium. One was by Malcolm Longair from the Cavendish Laboratory in Cambridge. In one hour he summarized the scientific achievements of astronomy, astrophysics and cosmology over the last 100 years – an incredible intellectual tour de force that was one of the symposium highlights. The other was by former IAU president Catherine Cesarsky, who reviewed the entire history of the IAU in an equally notable contribution.

As the volume shows very clearly in many papers presented, the IAU has undergone a remarkable evolution over its lifetime. At first it was an inward-looking club for about 200 professional astronomers, who set criteria for standards and classification schemes used in astronomy. Today, it is a large organization of some 13500 astronomers who are engaged not only in research but also in education, outreach and promoting astronomy in society in general, including interacting with the media. This remarkable transformation began more than 50 years ago, first by promoting exchanges of research astronomers, then the education of graduate students, next by outreach to the public, and with the training of school teachers to teach astronomy, then with the promotion of women in astronomy, assisting junior astronomers with their careers (with a new IAU membership category of junior astronomer), interactions with amateur astronomers, and finally by promoting equity, diversity and inclusivity in the astronomical community world-wide.

There is no doubt this trend of a social revolution in how astronomy is practised around the world will continue in the Union's second century, now about to begin. The further promotion of Junior Members, the expansion of the ISYA schools, and the establishment of a new *Office for Astronomy Education* are all pointers of what should be in store for the years to come.

The IAU has had many notable successes, but also some crises, and these are in some cases described in this volume. The question of admittance of the Central Powers (Germany, Austria, Hungary, Bulgaria, Turkey) after the Great War was an issue that was only resolved after World War II; it is described here in the article by Roland

Wielen. The crisis posed by mainland China leaving the IAU for some 20 years after the admission of Taiwan in 1960 is discussed in the article by Xiaowei Liu. The confusion and consternation (in the eyes of some astronomers) by having two competing General Assemblies in 1973, in Sydney and Torun, is alluded to in several papers.

In spite of these temporary setbacks, the Union is now much stronger, perhaps in part as a result of resolving the difficulties that arose from time to time. The future is indeed exciting and the importance of the Union as a force for the benefit of astronomy and international science generally is evident for all to see, especially for the several hundred participants in this symposium, and for those who read this volume.

Finally I wish to thank the scientific organizing committee of seven women and nine men from 13 different countries who put the programme of the Centenary Symposium together, and also my two co-editors, David Valls-Gabaud (Paris) and Christiaan Sterken (Brussels), who worked very hard to edit almost 70 papers for this volume in the months following the General Assembly in August 2018.

*John Hearnshaw  
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