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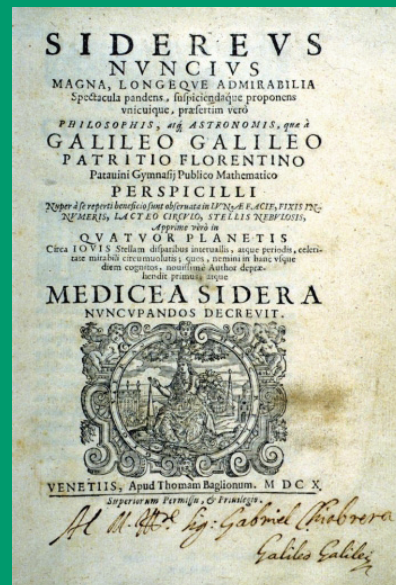
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VOLUME 15

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COVER ILLUSTRATION

THE FRONTISPIECE OF *Sidereus Nuncius* (“STARRY MESSENGER”) BY GALILEO GALILEI. PUBLISHED IN MARCH 1610, IT WAS THE FIRST SCIENTIFIC REPORT ON OBSERVATIONS MADE THROUGH A TELESCOPE, GIVING THE RESULTS OF GALILEO’S EARLY OBSERVATIONS OF THE MOON, THE STARS, AND THE MOONS OF JUPITER. THIS IS SEEN AS THE START OF MODERN ASTRONOMY. THE INTERNATIONAL YEAR OF ASTRONOMY 2009 COMMEMORATES GALILEO’S CONTRIBUTIONS TO ASTRONOMY AND SCIENCE.

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Editors of Joint Discussions and Special Sessions  
held at the XXVII General Assembly 2009

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ASTRONOMY  
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Edited by

**IAN F. CORBETT**  
*General Secretary*



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## Preface

Highlights of Astronomy 15 records the scientific sessions which took place during the XXVII IAU General Assembly held in the Centro de Convenções SulAmérica during the International Year of Astronomy 2009, in the magnificent city of Rio de Janeiro, Brazil, hosted by the Brazilian Astronomical Society (Sociedade Astronômica Brasileira, SAB).

The XXVII Assembly offered a rich scientific programme organized by the General Secretary Karel. A. van der Hucht. There were four Invited Discourses, six Symposia (IAUS 262 – 267), 16 Joint Discussions, 10 Special Sessions, and 7 scientific sessions in the course of Divisional Business meetings. A major, and very successful, innovation was the inclusion of Plenary Reviews at the start of the day, the speakers being drawn from the 6 symposia. This is a feature likely to be repeated at future General Assemblies.

The proceedings of the six IAU GA Symposia IAUS 262 – 267 have been published in the regular *IAU Symposium Proceedings Series* by Cambridge University Press. The Plenary Review corresponding to each symposium will be included in the proceedings of that symposium. I am extremely grateful to the editors and the organizing committees of all the Symposia, Joint Discussions, and Special Sessions for their hard work in producing the manuscripts for the Proceedings and for this volume of Highlights. This would be impossible without their efforts.

The business proceedings of the General Assembly were published in May 2010 by CUP as Transactions of the International Astronomical Union XXVIII.

Financial support for a limited number of the participants was provided by the IAU, and the invaluable support of all the sponsors is gratefully acknowledged.

It is my pleasure to thank Karel van der Hucht who pulled together the scientific programme, and the staff of the IAU Secretariat, Mme Vivien Reuter and Mme Jana Zilova, for their invaluable assistance in preparing for the General Assembly and then looking after attendees during the meeting, and particularly handling all the grants. I extend particular thanks to James Binney, organiser and editor of Joint Discussion 5, for giving me a powerful LaTeX tool to edit and assemble these Highlights.

Finally, and most importantly, we are all most grateful to Daniela Lazarro, Beatriz Barbuy and every member of the National Organizing Committee, and its sub-committees, for a most memorable XXVII General Assembly.

*Ian F. Corbett*  
*IAU General Secretary*  
*Paris, May 2010*