PREFACE

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This issue of “Baltic Astronomy” contains the papers presented at the 8th Serbian Conference on Spectral Line Shapes in Astrophysics – SCSLSA. The conference was held in hotel Divčibare, on mountain Divčibare, Serbia, 2011 June 5–10. Contributions in this issue are about the investigation of spectral line shapes in extragalactic objects (e.g., active galactic nuclei), stellar atmospheres and astrophysical spectra in general, as well as on atomic spectral line shapes in various discharges and plasma devices.

The main purpose of the conference was to present and discuss new results obtained by the participants working in this research field, and to review the most significant topics. Participants (total 57) are known specialists in this field from 16 countries from America, Europe and Africa, and many Ph.D. students. This special issue of “Baltic Astronomy” gives review lectures of interest for specialists and Ph.D. students and research papers providing an information about the new results in the covered topics.

We started this series of conferences on spectral line shapes with an idea to have a possibility to meet with our colleagues in the years when the when the ICSLS (International Conference on Spectral Line Shape) meeting does not take place. The conference gives an opportunity to exchange ideas and to discuss recent results with colleagues working in this field in Serbia and elsewhere. The first conference from this series, named “Yugoslav Conference on Spectral Line Shapes”, was held in Krivaja near Bačka Topola on 1995 September 11–14, the second in Bela Crkva on 1997 September 29 – October 2, and the third in Brankovac on Fruska Gora on 1999 September 4–6. The next one in 2001 was not organized, but after two years we continued the series in Arandjelovac on 2003 October 10–15, with a changed name to “IV Serbian Conference on Spectral Line Shapes”. The previous meetings proved that the main interest in them is related with astrophysics, the next conference, organized in Vračar on 2005 June 6–10 was named the “5th Serbian Conference on Spectral Line Shapes in Astrophysics” (SCSLSA). The 6th SCSLSA was organized in Sremski Karlovo on 2007 June 11–15 and the 7th – in Zrenjanin on 2009 June 15–19.

We hope that this series of meetings will be useful for our colleagues interested
in the research of spectral line shapes and will provide an additional possibility for
the exchange of ideas, for the development of collaboration, and will contribute to
the education of young scientists in physics and astrophysics.

The Editors would like to thank the invited speakers for their participation in
the 8SCSLSA and for their efforts in writing contributions for this publication.
We also express our gratitude to the members of the Scientific and Organizing
committees for their efforts and enormous help in organization of this conference.
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