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THE 2ND MEETING ON HOT SUBDWARF STARS AND RELATED OBJECTS

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1. INTRODUCTION

The first meeting dedicated to hot subdwarf stars was held in Keele, U.K. on 2003 June 16–20. The idea of such a meeting was conceived by Pierre Maxted, and in his report in the proceedings of that meeting the full background is given (Maxted 2004). When I went to that meeting, I had just started a new three-year contract as a PPARC research fellow at the Isaac Newton Group of Telescopes (ING) on La Palma, Canary Islands. Since it has been a tradition for the research fellows at ING to organize a conference or workshop during their contract period, the possibility of hosting a follow-up meeting to the Keele event was on my mind. When several people suggested La Palma as a good option for the next meeting, I was not slow to accept, and on the last day of the Keele meeting, the offer to hold another meeting on La Palma in 2005 was presented.

The title of the first meeting was Extreme Horizontal Branch Stars and Related Objects. After a lengthy discussion in the SOC it was decided to change that to Hot Subdwarf Stars and Related Objects instead. The terms EHB stars and sdB/sdO stars are often used interchangeably, but the EHB term implies a specific evolutionary history. Recently, evidence has accumulated that many of the stars that appear similar to EHB stars in spectroscopic studies may have completely different evolutionary histories. From the beginning, the intention of the meeting was to keep it open to all these similar stars, falling under the extension *and related objects*. The term *hot subdwarf stars*, however, has no evolutionary implications, but is a classical term used in spectral classifications of blue stars. This term encompasses the sdB, sdOB and sdO stars as well as the helium rich varieties usually referred to as He-sdB or He-sdO stars. With *hot subdwarf stars* we include all objects that appear in the HR diagram below the main sequence and above the white dwarf cooling track, regardless of how they got there. The *related objects* extension was kept in order to make sure that objects such as the extreme helium (EHe) stars were not left out. (Technically they are subluminous, but due to their low gravities they are not classified as He-sdB stars.)

2. THE MEETING

The meeting took place in Santa Cruz de La Palma between the 6th and the 10th of 2005 June. 58 participants arrived from all over the world, almost half again as many as at the first meeting. The organization of the meeting was carried out in a collaboration between the Isaac Newton Group (ING) and the

Nordic Optical Telescope (NOT), both which contributed a considerable amount toward the budget of the meeting. Support for specific social events was provided by the local government (Excmo. Cabildo Insular de La Palma) and the tourist board (Patronato de Turismo de La Palma). Additionally, the Real Club Náutico de Santa Cruz de La Palma has been extremely helpful by making their excellent locales available to us at no cost. Thanks to all this financial support we were able to keep a very reasonable registration fee, and even waive it completely for about a third of the participants who were students or without financial support at the time. On behalf of all the participants who enjoyed the hospitality of La Palma, I would like to thank all the organizations involved.

The meeting room at the Real Club Náutico provided an excellent environment for the event. The Club's restaurant also managed to provide excellent coffee breaks with delicious and varied snacks, as well as a very impressive conference dinner. Being in the center of the city allowed people to use the extended lunch break to explore the old city and find their own places to eat.

Fig. 1. At the meeting.

3. THE SESSIONS

The meeting was divided into sessions that covered a broad range of topics related to the hot subdwarf stars. They were:

- Evolutionary models and the UV-upturn phenomenon;
- Hot subdwarfs and hot HB stars in the field, clusters and galaxies;
- Atmospheric properties of hot subdwarf stars;
- Hot subdwarfs in binary systems;
- Asteroseismology of sdB stars.

Eight half-day sessions were completed during the meeting, with three sessions dedicated to asteroseismology, two sessions for atmospheric properties and the remaining topics filling one session each. The contributions in these proceedings are arranged roughly along the order of the listed sessions. All the talks were limited to 30 minutes, with 5 minutes extra for discussions. Interleaved with the talks were short oral presentations with discussions of the posters.

4. THE ISLAND

The island of La Palma is one of the smaller Canary Islands, with a surface area of 706 km^2 and a population of only 80 000. It is unusual in that it rises exceptionally steeply from the ocean floor (from a depth of 4000 m) to a volcanic crater rim at an altitude of between 2000 and 2500 meters. The Observatory is located around the highest point, the Roque de los Muchacos (2426 m).

Fig. 2. At the William Herschel Telescope.

The participants of the meeting were invited to tour the observatory area and visit the 4.2 m William Herschel Telescope (WHT, see Fig. 2), the 2.5 m Nordic Optical Telescope (NOT) and the 10 m Gran Telescopio Canarias (GTC) which is currently being assembled in its enormous dome.

Fig. 3. Exploring the volcanoes.

On Friday evening, after the end of the meeting, a farewell party was held at the swimming-pool resort of the Real Club Náutico, in the harbor of Santa Cruz de La Palma. Most of the participants also enjoyed the entertainment provided by the local observatory band *Manifold*, and some even braved the dance floor.

On Saturday after the end of the meeting, the participants who had the opportunity to stay another day were invited to a tour around the island, including a visit to some recent volcanoes (Fig. 3).

5. THE PROCEEDINGS

For the first meeting it was decided by the SOC to submit all contributions to a thorough refereeing process, and the participants were called to assist with the reviewing of the papers (Maxted 2004). For this second meeting we have even called upon experts not present at the meeting, in order to ensure that all papers have been refereed by qualified researchers. This process has gone exceptionally smoothly thanks to the prompt response of (almost) all the referees.

An issue that the SOC was not happy with from the proceedings of the first meeting was the long printing time. The SOC felt that the purpose of publishing results from work in progress was somewhat defeated if the time between the original presentation and the printed version was more than a year. For this reason we sought to find a publisher who could promise us quick printing and freely accessible on-line versions at an affordable price. Baltic Astronomy was quick to promise us the first issue of 2006 for our purposes. In addition to the regular journal issues, we could obtain special hard-back copies for the participants at a very reasonable price.

Oral presentations from the meeting have been given a page limit of eight pages (although a few participants has been allowed to exceed this), and short "poster" presentations were limited to four pages. Three contributions are published in other journals, and for this reason only an abstract version is presented at the end of the proceedings book, with reference to the journal paper.

6. OTHER REMARKS

The LOC put a lot of effort into designing useful web-pages to assist the participants with information about the meeting, registration and manuscript submission. (`http://www.ing.iac.es/conferences/subdwarf/`). All the pages are written in PHP[1] and changes dynamically according to what information is available. A registration system was made using a PHP interface to a MySQL[2] database. The on-line registration form allowed participants to enter their registration data, update information such as talk titles and abstracts, and the database allowed automatic update of the conference program. An automatic interface for submission of the proceedings which also did some basic checks on the manuscripts, was also provided. The pages will remain accessible for the foreseeable future, and anybody interested in reworking this system for other events can contact the author.

The SOC wishes to thank the members of the LOC for their work in managing the event. Special thanks goes to Javier Méndez of the Isaac Newton Group for his excellent work in managing the venue and all the social events, as well as the design of the poster and the photos for the meeting.

After the success of this second meeting, the group in Bamberg has offered to host the 3rd meeting in 2007. It is clear that a new tradition for a biennial series of meetings on hot subdwarf stars has been established.

REFERENCES

Maxted P. F. L. 2004, Ap&SS, 291, 193

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[1] PHP (`www.php.net`) is a script language that generates HTML documents.

[2] MySQL (`www.mysql.com`) is an open source database system.