

COMMISSION 45

STELLAR CLASSIFICATION

CLASSIFICATION STELLAIRE

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DIVISION IV / COMMISSION 45 WORKING GROUP

Division IV / Commission 45 / WG Standard Stars

PROCEEDINGS BUSINESS MEETING on 16 August 2006

1. Business

The Business Meeting of Commission 45 was held on 16 August 2006. It was attended by the president and vice-president of the Commission as well as by twenty other members of the Commission. Attendance was limited, as usual, by the unavoidable occurrence of parallel sessions.

The memories of our colleague Dr. Charles Perry were recalled at the meeting. Subsequently in September 2006, and with deep regret, we learnt of the death of Dr. Laura Pasinetti, one of the retiring members of the Organizing Committee.

New members of the IAU who are known to be joining Commission 45 are Carlos Allende Prieto, Cassio L. Barbosa, Johan Holmberg, Yuri V. Pakhomov, and Allyn John Smith. These were warmly welcomed.

The President reported that a proposal, initiated by the Commission, for an IAU Joint Discussion during the IAU XXVI General Assembly on *Exploiting Large Surveys for Galactic Astronomy* had been approved by the Executive Committee. Vigorous support from four participating Divisions and five additional Commissions, leading to a Scientific Organizing Committee of ten persons, had resulted in a stimulating programme. The main goals of this Joint Discussion were to review the major surveys in astronomy whose targets are stars, to appreciate the scientific goals and the byproducts of these surveys with respect to our understanding of Galactic astronomy, to consider how well the techniques employed achieve these goals, and to exchange ideas on how best to exploit the opportunities of future surveys. A report of this meeting is given in *Highlights of Astronomy, Volume 14* (CUP, 2007, ed. K.A. van der Hucht), and full proceedings are published in the *Memorie della Societ  Astronomica Italiana*, volume 77, n.4.

The president also drew the attention of the meeting to the Commission 45 contribution to *Transactions IAU XXVIA, Reports on Astronomy 2002-2005* (CUP, 2007, ed. O. Engvold), where activity in stellar classification over the last several years is cited, and he thanked all the contributors to this report. Two major developments have been the unification of the T-dwarf standards and an ongoing project, the new general catalogue of stellar spectral classification by Brian Skiff. See <<http://cdsweb.u-strasbg.fr/viz-bin/VizieR?-source=III/233B>>.

The third major activity of Commission 45, the Working Group on *Standard Stars*, and the production of its newsletter is reported in the following pages of these Transactions.

2. New Organizing Committee and president

The Organising Committee (OC) for the next triennium was arranged by e-mail prior to the General Assembly. Nominations from the Commission Membership at large were just sufficient to fill vacancies arising from the usual process of rotation, so it was not necessary to hold an election. Retiring members of the OC were sincerely thanked, and the incoming members and officers were acclaimed by those present.

The constitution of the new OC 2006-2009: Sunetra Giridhar (president, India), Richard O. Gray (vice-president, USA). Members: Coryn A.L. Bailer-Jones (Germany), Christopher J. Corbally, PP (Vatican City State), Laurent Eyer (Switzerland), Michael J. Irwin (UK), Joseph D. Kirkpatrick (USA), Steven R. Majewski (USA), Dante Minniti (Chile), and Birgitta Nordström (Denmark).

3. Science

The scientific programme started with a provocative talk by H. Levato (Complejo Astronomico el Leoncito) on *Spectral classification in the southern hemisphere: old fashioned technique? Or the best one for astrophysical insight?* This led to considerable discussion on the role of Commission 45 for promoting astronomy in the coming decade or so. Areas of influence included further extensions of classification to peculiar stars, to those of non-solar metallicity, and into spectral domains other than the classical blue-green region. These extensions were particularly important to implement for the automated classification of stellar spectra.

The larger surveys were devising new sets of photometric filters or, like the *Gaia* survey, new systems of spectrophotometric bins. There was discussion on the role of Commission 45 to stimulate the best development of these new systems and to promote communication among the various survey teams.

The incoming president undertook that the OC would, in consultation with the whole membership, produce a new statement of purpose for Commission 45, and that it would outline steps to implement this for the general benefit of astronomy.

4. Closing remarks

The president thanked those present for their participation in this meeting and for their support of Commission 45's work in the last three years, and he wished them every success in their work and projects during the coming triennium.

Christopher J. Corbally
president of the Commission