

DIVISION IV: STARS

(ÉTOILES)

PRESIDENT: Beatriz Barbuy

VICE-PRESIDENT: Dainis Dravins

**BOARD: Lawrence Cram, Tom Lloyd Evans, Gautier Mathys, Colin Scarfe,
Don Vandenberg**

Commission 26: Double and Multiple Stars

Commission 29: Stellar Spectra

Commission 35: Stellar Constitution

Commission 36: Theory of Stellar Atmospheres

Commission 45: Stellar Classification

1. INTRODUCTION

In the present text is presented a short report of the meeting of Division IV, at the XXVth IAU General Assembly, held on 21.07.2003 in Sydney.

The Organizing Committee of Division IV comprises the Presidents of the five Commissions that form the Division, and the Past and Present Division Presidents. The new members of the OC of Division IV are: Dainis Dravins (President), Beatriz Barbuy (Past President), William Hartkopf (Commission 26), Christopher Sneden (Commission 29), Wojciech Dziembowski (Commission 35), Monique Spite (Commission 36), Christopher Corbally (Commission 45).

The Working Group on 'Peculiar and Related Stars' has asked to be affiliated to Divisions IV and V, instead of being affiliated to Commission 45. The members of Div. IV present in the meeting in Sydney have approved this proposal.

2. RESOLUTION: ON THE ZERO POINT OF BOLOMETRIC MAGNITUDES

Due to the absence of a strict definition for the zero point of bolometric magnitudes, and the proliferation of different zero points in the literature, Commission 25 and Commission 36 have both approved the Resolution below, in 1999, as proposed by R. Cayrel. Division IV has approved the Resolution in 2003 in Sydney, as follows:

The zero point is defined by specifying that the absolute radiative luminosity, L , of a star of absolute bolometric magnitude $M_{\text{bol}} = 0$ has the value:

$$L = 3.055 \times 10^{28} \text{ W.}$$

This choice is intended to be close to the most current practice, and its equivalent to taking the value $M_{\text{bol}} = 4.75$ (C. Allen, "Astrophysical Quantities") for the nominal bolometric luminosity adopted for the Sun by the international GONG project ($L_{\odot} = 3.846 \times 10^{26} \text{ W}$).

Beatriz Barbuy
President of the Division