

THE NEW MULTIFUNCTIONAL SPECTROGRAPH AT BOSQUE ALEGRE STATION

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The new observational facility available at Bosque Alegre Station (Córdoba Observatory) is described. The spectrograph is mounted on the 1.54-m Nasmyth reflector. The detector is a CCD camera (Photometrics AT 200), equipped with a 1024 × 1024 chip (Thomson CH 7896). The deviations from linearity of response are below 0.1%. The spectrograph consists of a Maksutov-type collimator system of 600 mm focal length ($f/12$) and an apochromatic camera lens of 200 mm focal length ($f/3.5$). The pixel size projected onto the sky is $0''.38$, which corresponds to an equivalent focal length of 10.38 m. Three gratings are available for the spectroscopic modes: 300 g/mm, 600 g/mm and 1200 g/mm. This spectrograph is of a modular design, intended to allow different configurations and observing modes during the same night. The different configurations available are:

- direct image, with the possibility of using colored filters or interference filters,
- multi-pupil image (by using the field-pupil inversion principle), again with or without filters,
- long-slit grating spectroscopy,
- integral field spectroscopy, with grating and lens array (Tiger type, le Coarer 1992),
- scanning Fabry-Pérot two-dimensional spectrometry (Cigale type, Boulesteix et al. 1984),
- cross-dispersion (Fabry-Pérot + grating) spectrometry (Pytheas type, le Coarer 1992),
- Echelle spectroscopy.

Boulesteix J., Georgelin Y.P., Marcelin M., & Monnet G. 1984, Proc. SPIE 445, Boksenberg, Crawford eds., p. 37

Le Coarer E. 1992, Ph.D. Thesis, Université de Paris VII

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A GRAVITATIONAL RADIATION OBSERVATORY IN SOUTH AMERICA

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In 1991 Brazil started the feasibility studies to build a massive three-meter diameter spheroidal antenna for gravitational wave detection under the project name: GRAVITON. In 1993, groups from USA, Italy and Netherlands proposed similar projects. Finally, in June of 1994 the first basis of an international collaboration were established under the name OMEGA (an international study group for OMnidirectional Experiments with Gravitational Antennas) between these groups and the Australian group from Perth. The idea is to finish all necessary feasibility studies, for the construction of an international array of such antennas, by 1996. In order to help conclude the feasibility studies for this, a workshop, named OMNI-1, is being organized at INPE, Brazil, for the period of May 26–31. The possibility of a joint effort between countries of South America could increase the chances to build more than one antenna in the continent.

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A NEW ASTROLABE CAMPAIGN AT RIO DE JANEIRO

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In this paper we present the modifications made on the Danjon Astrolabe at the CNPq/Observatório Nacional/ Brazil to enable solar observations at two zenith distances. These modifications follow the scheme developed at the Observatoire de La Côte D'Azur/France. To provide the supplementary 45° zenith distance observations, a base parallel to the optics axis is rigidly connected to the adjustable part of the instrument's chassis. Upon this base, the 135° reflecting prism is placed, through highly stable support pins. Extensions of the regular commands for the auto-collimation, allow, correspondingly, the precise orientation of the reflecting prism edge relatively to the instrument. The vertical alignment of the direct and reflected images is obtained through the action of a micrometric screw on the front-edge tilt.

The CCD camera is mounted on a plate at the astrolabe ocular. The plate slides allowing a

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