

A significant excess (600%) of objects with an axial ratio between 0.6 and 0.7 was found; this could indicate an excess of Seyfert galaxies at intermediate viewing angles, or it could be the result of some past interaction in these objects. Any of these two options gives important clues about the geometrical features of the "engine" in Seyfert galaxies.

MBG02223-1922: A NEWLY IDENTIFIED LUMINOUS SEYFERT GALAXY

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In the context of the Montreal Blue Galaxy (MBG) survey (Coziol et al. 1993, AJ, 105, 35), we report the identification of MBG02223-1922 (ESO 545- G 013, MCG-03-07-011, IRAS F02223-1921) as a new, bright, Seyfert 1 galaxy. In this work, we present optical spectrophotometry (from 4300 to 6800 Å) and direct imaging in *B*, *V* and *I* bands, obtained with the 2.1-m telescope at Observatorio Astronómico Nacional, B.C., México.

Analysis of the spectrum reveals unusually broad and composite forbidden lines suggesting a complex dynamical structure of the Narrow Line Region. For all the lines we find a broad component of 1000 to 2000 km s⁻¹ wide and a narrow one of about 400 km s⁻¹. We derive a redshift of $z = 0.0338 \pm 0.0002$ and an absolute magnitude $M_B = -21.8$ for this galaxy, which places it among the 10% most luminous Seyfert 1 galaxies known. Fluxes from the nucleus, from the far-infrared (*IRAS*) to the optical, follow a well determined power law, $F_\nu = \nu^\alpha$, with a relatively flat index, $\alpha = -1.34$, typical of *UV*-bright selected Seyfert 1 and QSOs.

This galaxy has also an extended emission line region and it is the host of a starburst. From spatial informations in long slit spectroscopy, we observe an emission region extending 2 arcsec with a giant H II region 5 arcsec west of the nucleus.

The object shows mildly strong IR luminosity, $L_{IR} = 6.3 \times 10 L_\odot$. This, along with a relatively flat far-infrared index ($\alpha(12,60) = -1.33$), an average value of the flux ratio $\log [F(60\mu\text{m})/F(\lambda 5007)] = 2.5$ and an internal reddening $E(B-V) = 0.38$ suggest that only a small amount of dust is present in the nucleus. The different properties of this object seem to indicate an intermediate nature between the two main Seyfert-type galaxies. MBG02223-

1922 is probably a good example of what is called a Seyfert 1.8.

The full version of this work has been published in Coziol et al. (1993, MNRAS, 261, 170).

MEPSICRON SPECTROPHOTOMETRY OF SEYFERT GALAXIES

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Based on observations of 52 Seyfert galaxies (26 Sy 1 and 26 Sy 2) carried out at the Observatorio Astronómico Nacional at San Pedro Mártir, B.C., the characteristics of the narrow line region (NLR) and the broad line region (BLR) were studied. We report the following results:

(1) The comparison of the observed line intensities with the Stasinska (1984, A&AS, 55, 15) models suggest that the photoionization mechanisms for line formation is dominant in the NLR, but in the case of [O II] an additional mechanism (possibly shocks) could be present.

(2) An estimate of the masses and sizes of the BLR of Sy 1 galaxies shows that the typical masses and radii are $\leq 10^8 M_\odot$ and ≤ 0.1 pc, respectively. It is found also that these objects are radiating on average at 1/8 of the Eddington luminosity.

(3) Using emission nebulae methods (Osterbrock 1989) it is found that the NLR masses and radii for Sy 2 galaxies are $\approx 10^{5-6} M_\odot$ and 50 pc.

(4) The presence of Fe II features in both types of Seyfert galaxies is studied and a correlation between the blue emission and the total optical emission is found.

PROGRAMA DE CONSULTA DEL CATALOGO DE CUASARES DE HEWITT Y BURBIDGE 1989

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El programa de consulta fue desarrollado para realizar una búsqueda selectiva de cuasares en el *Hewitt and Burbidge 1989 Optical Catalog of QSOs*, el cual contiene información de 4296 cuasares y 87 objetos BL Lac. El programa fue escrito en lenguaje C del sistema SUN, utilizando las capacidades

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