

THE OPEN CLUSTER NGC 6193: SPECTRAL TYPES, AXIAL
ROTATION AND BINARITY

Marcelo Arnal

Facultad de Ciencias Astronómicas y Geofísicas de La Plata
Instituto Argentino de Radioastronomía, CONICET.

Hugo Levato

Complejo Astronómico El Leoncito, CONICET.

Beatríz García

Nidia Morrell

Facultad de Ciencias Astronómicas y Geofísicas de La Plata,
CIC CONICET

RESUMEN. Presentamos tipos espectrales MK, estimaciones de $V \sin i$ y análisis de velocidades radiales para 20 miembros de NGC 6193, núcleo de la asociación Ara OB1.

ABSTRACT. We present MK spectral types, $V \sin i$ determinations and radial velocities analysis for 20 members of the open cluster NGC 6193, which is the nucleus of Ara OB1 association.

Key words: CLUSTERS-OPEN -- STARS-BINARY -- STARS-ROTATION

The open cluster NGC 6193 is the nucleus of the Ara OB1 association ($\alpha = 16:40, \delta = -48; 40$; coordinates for 1985).

We observed between May and June 1985, 20 stars that are probable members of this cluster. We obtained 20 spectrograms per star, using the 1m-Yale telescope at Cerro Tololo and its Cassegrain spectrograph, giving a dispersion of $43 \text{ \AA/mm}$.

We recorded the spectra on III a-J emulsion— using this material we derived spectral types (with the MK technique), projected axial rotational velocities ($V \sin i$), and radial velocities (in a Grant machine at La Plata Obs.).

The radial velocities were studied by using an analysis of variance (F - test; see Conti, Garmany and Hutchings 1977). This analysis shows a 80% of radial velocity variables and among them there are 2 SB2.

REFERENCES.

Conti, P., Garmany, C. and Hutchings 1977, Ap. J. 215, 563.

Arnal, M.: Instituto Argentino de Radioastronomía - C.C. 5, 1894 Villa Elisa (Bs. As.).

Levato, H.: Complejo astronómico El Leoncito - Casilla 467 - 5400 San Juan.

García, B. and Morrell, N.: Facultad de Ciencias Astronómicas y Geofísicas de la U.N.L.P. - Paseo del Bosque - 1900 La Plata.