

range of 3,200Å to 8,100Å for three O emission, nine Be, and two Ae stars observed by two-channel scanner at the observatoire de Lyon and Laboratoire d'Astronomie Spatial.

Balmer discontinuities are estimated by means of BCD(1939, Barbier and Chalonge) from the measured energy distributions by comparing them with those of the normal stars. Among Be many have small Balmer discontinuity than that exhibited by the main sequence stars of similar spectral type.

Our de-reddened fluxes together with the ultraviolet measurements of Thomson et al. (1978) are compared to those of Kurucz's model atmospheres(1979) to derive effective temperatures of these stars. With the measured monochromatic fluxes we determined their angular diameters and luminosities. It is found that the majority of these stars are cooler than the zero age main sequence (ZAMS) in the H-R diagram, suggesting that they are slightly more evolved than the ZAMS stars.

Mass-Luminosity Relation for Main-Sequence Stars

Whang, Yun Oh and Lee, Sang-Gak

Department of Astronomy, Seoul National University

The mass-luminosity relation for main-sequence stars is derived from the 58 visual binary systems, which is found to be $(L/L_{\odot}) \propto (M/M_{\odot})^{3.6}$. In this study, the change of exponent suggested by Strand and Worley(1963) near $M_{bol}=7.5$ mag. is not found. Some explanations for the difference between our result and others will be discussed.

Long-Term Luminosity Variation and Dynamo Cycle in Late Type Dwarfs

Park, Chang Bum and Yun, Hong Sik

Department of Astronomy, Seoul National University

Making use of our revised Öpik's convection theory, we have calculated magnetic cycle periods of late type stars by using Parker's dynamo theory to analyze observed magnetic activities of later type stars and long-term luminosity variations observed in spot stars.

From the present investigation it is found that (1) the stellar magnetic cycle period increases towards the later spectral type, (2) the rapid rotation facilitates the activity-related luminosity variation for stars later than about K5 and (3) differential rotation plays a critical role in determining the magnetic activity-cycle period. Finally, it is suggested that the non-local effects should be taken into account in order to understand the observed long-term luminosity variations.

Period Change of BW Vul

Jung, Jae Hoon

National Astronomical Observatory

Lee, See-Woo

Department of Astronomy, Seoul National University

Photoelectric observations of β Cephei star, BW Vul were carried out with UBV and Strömgren b