COMMISSION 27 OF THE I. A. U. INFORMATION BULLETIN ON VARIABLE STARS NUMBER 40

Konkoly Observatory Budapest 20 November 1963

PHOTOELECTRIC AND SPECTROSCOPIC OBSERVATIONS OF 48 PERSEI AND 53 PERSEI

The Be-star 48 Persei has already been observed some time ago (see VSS 5,No.5). In order to get acquainted more accurately with the light variation the star was observed photoelectrically in February and March 1963 in the yellow region. During this time it had a maximum as well as a minimum of brightness; the amplitude is 0. In case the light variation should be periodic which is probable, at least approximately, the "period" during the time of observation might be about 55 days.

The spectrum of this star was taken simultaneously on Agfa-Z emulsion. The plates show the Balmer series beginning with H γ . H $_{7}$, H $_{5}$ and H $_{6}$ are often to be seen with emission components. A certain frequency of the emissions might be possible during the descent towards the minimum of brightness, the emissions showing then sometimes central absorptions.

Together with 48 Persei the star 53 Persei has been observed photoelectrically in V. Its brightness fluctuates within about 0^m.15. Even if one takes into consideration that the error of the measurements is larger in this case than with 48 Per, yet the range of 0^m.07 must be regarded as absolutely certain. A period could not be determined.

Details of both stars will soon be published in MVS.

G. JACKISCH Sonneberg Observatory