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3 C 273

In No. 23 of these Bulletins the light variation of the radio source 3 C 273 was announced by Dr. EFREMOV and Dr. SHAROV from the Sternberg Astronomical Institute, Moscow. According to a letter by Dr. Harlan J. SMITH from the Yale University Observatory (New Haven Conn. U.S.A.), he and Miss Dorrit HOFFLEIT found - independently of the above named - in March the light of this object to be variable. They estimated about 600 magnitudes of it on Harvard plates and sent a summary of these observations to the British journal Nature on 9 April. Dr. SMITH asks individuals having plates from which magnitudes of 3 C 273 can be estimated to be so kind and to communicate the magnitudes to him (or the existence of the plates) for the master light curve which he is assembling on IBM cards.

So far he has about 1400 observations from Harvard plates but in particular the years before 1920 and after 1952 are in desperate need of more observations.

As Dr. SMITH writes, he interprets the several modes of variations as indicating that the luminous source in 3 C 273 may in fact be a hyper-star of around 10^6 and 10^7 solar masses, pulsating under gravity. This interpretation is consistent with the photometric observations and furthermore relates to the recent remarks by HOYLE and FOWLER to the effect that a class of hyper-stars in this mass range may exist (MN 125 No.2; Nature, 9 February 1963).

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editor