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OMICRON ANDROMEDAE: ANOTHER RECURRENT PHENOMENON ?

Horn (1977) has reported that the absorption-shell components of the hydrogen lines have disappeared and that the emission components of H α have weakened and are below the continuum level.

We remark that this phenomenon has occurred about two years after the appearance of the shell spectrum and of H α emissions. Furthermore, during the past shell-phase of α And, Slettebak (1952) observed a disappearance of the H α emissions in 1949, three years after the beginning of the shell phase, that is at about the middle of this phase.

Now, if the shell features shall develop again, we may suppose that the dramatic changes claimed by Horn are a recurrent phenomenon during the shell phases of α And. Its recurrence would be of 28-29 years. A value close to this periodicity results from the recurrent appearance of the shell spectrum (Fracassini and Pasinetti, 1975). A rough value of this size is also exhibited by a period analysis of the radial velocities from 1900 to 1976 (Fracassini et al., 1977).

If the emphasized phenomenon is really recurrent, it may be of interest for the right understanding of this shell phenomenon and for the construction of a suitable model.

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References:

- Fracassini, M., Pasinetti, L.E., 1975, I.B.V.S. No. 1044
Fracassini, M., Pasinetti, L.E., Pastori, L., 1977 *Astrophys. and Sp. Sci.*, **49**, 145
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Slettebak, A. 1952, *Astrophys. J.*, **115**, 573

ERRATUM

In I.B.V.S. No. 1348 one of the references was incorrectly printed. It should read :

Lorenzi, L.: 1977, Astron Astrophys. 55, 295