

RADIAL VELOCITY VARIATIONS OF THE Be SHELL STAR V923 AQL /HD 183556/  
IN THE PAST SIXTY YEARS

P.KOUBSKÝ<sup>1</sup>, A.F.GULLIVER<sup>2</sup>, P. HARMANEC<sup>1</sup>, D.BALLEREAU<sup>3</sup>,  
J. CHAUVILLE<sup>3</sup>, T. GRÁF<sup>1</sup>, J. HORN<sup>1</sup>, L.ILIEV<sup>4</sup>, R. LYONS<sup>5</sup>  
1/ Ondřejov Observatory, 251 65 Ondřejov, Czechoslovakia  
2/ Brandon University, Brandon, Manitoba R7A 6A9, Canada  
3/ Observatoire de Paris-Meudon, 92190 Meudon, France  
4/ National Astronomical Observatory Rozhen, Bulgaria  
5/ D. Dunlap Observatory, Richmond Hill, Ont. L4C 4Y6, Canada

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The analysis of 149 radial velocities of V923 Aql from 1927 to 1987 revealed that the observed RV variations arise from a superposition of cyclic long-term velocity variations of variable amplitude and cycle length /  $20 \leq 2K \leq 65 \text{ km.s}^{-1}$ ,  $1800 \text{d} \leq P \leq 2400 \text{d}$ / and an orbital motion with a period of 214.75 days and an amplitude  $2K=12.4 \text{ km.s}^{-1}$ . The binary system consists of a B5-7 e primary and low-mass /about  $0.5 M_{\odot}$ / secondary separated some  $250 R_{\odot}$ . Both, the long orbital period and low mass ratio are typical of /interacting/ binaries containing a Be star. The observed cycle length of the long-term changes are very similar to those observed for  $\zeta$  Tau, the only Be binary with the long-term variations known to date. V923 Aql thus becomes the second representative of binary Be stars, for which it is conceivable to interpret the long-term variations by an elongated envelope, revolving due to the attractive force of the secondary, and formed by the process of mass transfer from the secondary to primary, as predicted by the binary model of the Be phenomenon.

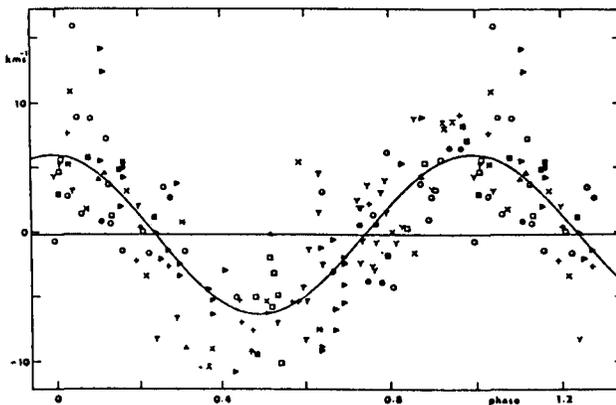


Figure 1. The orbital radial - velocity curve of V923 Aql after removal of the long-term changes.

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