MODELLING OF LIGHT CURVES OF ALGOL-TYPE SYSTEMS WITH ACCRETION DISKS: WW AND

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Olson's light curves of the Algol-type binary WW And, showing evidence of harbouring an accretion disk, were re-analysed. Two approaches were attempted to find a solution: the first one, the Roche geometry model assuming the system consisting of two stars, and the second one, including also the existence of an accretion disk around the hotter component. In both cases the Monte Carlo method was employed to search for the best solution. We found that adding an additional parameter, namely the third light, the data can be satisfactorily reproduced with only a marginal underfilling of the Roche lobe of the cool star, for the Roche geometry. A thorough search within the semidetached configuration, incuding an accretion disk around the hotter component, was performed. Although such a fit is slightly worse (as measured by the *rms* error) than that for the Roche geometry, it can explain the observed spectroscopic features. Absolute parameters of the components of this interacting binary are presented for both models.

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