# SOME MODIFICATIONS TO THE WILSON-DEVINNEY PROGRAM

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(Not reviewed)

Two important modifications implemented in the Wilson-Devinney light-curve interpretation program (Wilson & Devinney, 1971, 1973; Wilson, 1979), currently in use at Utrecht, are described.

Estimates for monochromatic stellar fluxes, previously calculated from fits to models from Carbon et al. (1969), are now superseded by more accurate estimates based on models from Kurucz (1979) which allow for log g and log abundance dependency. Passband-weighted model- versus blackbody-flux ratios are now available for the Johnson UBV, the Walraven VBLUW and the UPS passbands.

The general least-squares algorithm (based on standard Gaussian-type inversion techniques), used for updating previous estimates for the system parameters, has been replaced by a more stable algorithm based on orthogonal Householder transformations (Golub, 1965). The program has been modified to run on a Cyber 855 mainframe computer as well as on a MicroVAX II mini-computer.

References
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