

CORRELATIONS BETWEEN LINE PROFILE-AND PHOTOMETRIC  
VARIATIONS IN THE B2 IV [e] STAR HD 45677

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J.P. Swings<sup>1,2</sup>, R. Barbier<sup>2</sup>, M. Klutz<sup>1</sup>, A. Surdej<sup>3</sup> and J. Surdej<sup>3</sup>

<sup>1</sup>Institut d'Astrophysique de Liège

<sup>2</sup>European Southern Observatory, La Silla-Santiago

<sup>3</sup>European Southern Observatory, Geneva

Abstract

The results deduced from two sets of homogeneous simultaneous photometric and spectroscopic observations of HD 45677 in 1977 (6 nights of UBV data; 38 spectra) and in 1979 (7 nights of uvby data; 30 spectra) in a search for correlated variations are described. It appears that photometric data and some spectral features are well correlated (or anticorrelated) at certain epochs but not at all at others. Because of these conflicting results, no explanation of the behavior of the extended complex atmosphere surrounding this peculiar object can be proposed.