

**A STATISTICAL STUDY OF PHYSICAL PARAMETERS OF
THE C IV DENSITY REGIONS IN 20 Oe STARS**

A. Antoniou¹, E. Danezis¹, E. Lyratzi¹, D. Nikolaidis¹, L. Č. Popović², M. S. Dimitrijević²

¹*University of Athens, Faculty of Physics, Department of Astrophysics, Astronomy and
Mechanics, Panepistimioupoli, Zographou 157 84, Athens, Greece*

²*Astronomical Observatory, Volgina 7, 11160 Belgrade, Serbia*

In this poster paper we detect the presence of Satellite Absorption Components (SACs) which accompany the C IV resonance lines in the spectra of 20 Oe stars of different spectral subtypes, taken with I.U.E. The existence of SACs results to the peculiar profiles of the C IV lines. Using the method proposed by Danezis et al. (2003, 2005) we found that the C IV resonance lines consist of one to five SACs. We calculate the values of the apparent rotational and radial velocities, the Gaussian standard deviation of the random motions of the ions, the random velocities of these motions, as well as the optical depth, the column density, the Full Width at Half Maximum (FWHM), the absorbed and the emitted energy of the independent regions of matter which produce the main and the satellite components of the studied spectral lines. We present the variations of these physical parameters as a function of the spectral subtype. We point out that the new and important aspect of our study is the calculation of the above parameters and their variations as a function of spectral subtype, using the DACs/SACs theory. This study represents the second part of the analysis of the C IV density regions' physical parameters in 20 Oe stars.