Publ. Astron. Obs. Belgrade No. 84 (2008), 443 *Progress Report*

KINEMATICAL PARAMETERS IN THE CORONAL AND POST-CORONAL REGIONS OF THE Oe STARS

A. ANTONIOU[1], E. DANEZIS[1], E. LYRATZI [1,2], D. NIKOLAIDIS[1],
L. Č. POPOVIĆ[3] and M. S. DIMITRIJEVIĆ[3]

[1] *University of Athens, School of Physics, Department of Astrophysics, Astronomy and Mechanics, Panepistimiopolis, Zografos 157 84, Athens - Greece*
E–mails: ananton@phys.uoa.gr, edanezis@phys.uoa.gr, elyratzi@phys.uoa.gr, mail@nikolaidis.info

[2] *Eugenides Foundation, 387 Sygrou Av., 17564, Athens, Greece*

[3] *Astronomical Observatory of Belgrade, Volgina 7, 11160 Belgrade, Serbia*
E–mails: lpopovic@aob.bg.ac.yu, mdimitrijevic@aob.bg.ac.yu

Abstract. In this progress report we present the main results of our research. Using a new model we studied the kinematical parameters such as the random velocities of the ions, which create the spectral lines of the C IV, N IV and N V in the spectra of 20 O_e stars, as well as the rotational and radial velocities of the regions, where the above ions are created. We calculated the values of the above parameters and we present the relations between them as well as the variation of them as a function of the spectral subtype. We present the random velocities of the ions for each one of the C IV, N IV and N V regions as a function of the photospheric rotational velocities. Finally, we propose an explanation for the large widths that we observe in the studied spectral lines, as these widths can not be explained as large rotational or random velocities.