

## **STARK BROADENING MECHANISM IN HOT STELLAR ATMOSPHERES**

Zoran Simić, Milan S. Dimitrijević, Luka Č. Popović, Miodrag D. Dačić  
*Astronomical Observatory, Volgina 7, 11160, Belgrade, Serbia*

Stellar spectroscopy needs atomic and line-broadening parameters for a very extensive list of line transitions for various elements in neutral and ionized states. With the development of space-born observational techniques data on trace elements become more and more important for astrophysical problems as stellar plasma analysis and modeling, stellar opacity calculations and, interpretation and numerical synthesis of stellar spectra. In several works we investigated Stark broadening mechanism in atmospheres of A type stars and DB and DA white dwarfs. Here, we discuss the importance of Stark broadening data for stellar atmospheres plasma research on the basis of our results for spectral line widths of Cd I, F III, Cu III, Zn III and Se III transitions, obtained within the modified semi empirical approach and semi classical perturbation method.