

Poster paper

ON THE INFLUENCE OF STARK BROADENING ON Xe VIII SPECTRAL LINES IN DO WHITE DWARFS

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Recently, Stark broadening parameters have been calculated for Xe VIII $6s^2 S_{1/2} - 6p^2 P^o_{1/2}$ and $7s^2 S_{1/2} - 7p^2 P^o_{1/2}$ transitions, for broadening by electron, proton, and He III impacts, using the semi-classical perturbation approach (Dimitrijević et al. 2015).

The obtained results have been used to study the influence of Stark broadening on spectral lines in DO white dwarf atmospheres and importance of Stark broadening due to collisions with electrons, protons and He III ions is shown.

References

Dimitrijević, M. S., Simić, Z., Kovačević, A., Valjarević, A., Sahal-Bréchet, S.: 2015, *MNRAS*, **454**, 1736.