

STARK BROADENING OF SPECTRAL LINES WITHIN $3s^5S^o$ - $3p^5P$ MULTIPLY OF NEUTRAL OXYGEN

M. S. Dimitrijević^{1,2} and A. Bultel³

¹*Astronomical Observatory, Volgina 7, 11060 Belgrade 38, Serbia*

²*Sorbonne Université, Observatoire de Paris, Université PSL, CNRS, LERMA,
F-92190 Meudon, France*

³*CORIA, UMR CNRS 6614, Normandie Université, 76801 Saint-Etienne du
Rouvray cedex, France*

E-mail: mdimitrijevic@aob.rs, arnaud.bultel@coria.fr

Theoretical and experimental consideration of Stark broadening of spectral lines within O I $3s^5S^o$ - $3p^5P$ transition important for plasma diagnostic will be presented. The theoretical calculations are performed on the basis of the semi-classical theory developed in Sahal-Bréchet (1969a,b).

References

- Sahal-Bréchet, S.: 1969a, Impact theory of the broadening and shift of spectral lines due to electrons and ions in a plasma, *A&A*, **1**, 91-123.
Sahal-Bréchet, S.: 1969b, Impact theory of the broadening and shift of spectral lines due to electrons and ions in a plasma (continued), *A&A*, **2**, 322-354.