Line blanketing effects in atmospheres of O stars

F. Martins (1), D. Schaerer (1), D. J. Hillier (2)

(1) Laboratoire d'astrophysique, Observatoire Midi-Pyrénées, 14 Av. E. Belin, 31400 Toulouse, France
(2) Department of Physics and Astronomy, University of Pittsburgh, Pittsburgh, PA 15260, USA

We have computed new models of O stars atmospheres with the non-LTE comoving frame code CMFGEN (Hillier & Miller 1998) including the effect of spherical extension due to wind. Line blanketing is taken into account thanks to a method of super-levels. The comparison with pure H-He models show that the wind ionisation and the emergent spectrum are modified when metals are included. This results in a modification of the EUV flux and in a shift of the Teff-scale towards cooler values. We study quantitatively this last effect and its dependence on model parameters (mass loss rate, metallicity, shape of the velocity field, microturbulence). The implications of the change of the effective temperature scale for the ionizing fluxes are also discussed.