

## New Solutions to Line-Driven Winds in Hot Massive Stars

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In this talk, we present solutions for the line-force parameters ( $k$ ,  $\alpha$ ,  $\delta$ ) found to line-driven winds in a self-consistent performance with the wind hydrodynamics. Calculations are made after adding every individual spectral lines that contributes to the line-driven multiplier factor  $M(t)$ , with a total amount of more than 900 thousand lines. Analysis about differences between results under LTE and NLTE conditions is performed, in order to discuss when one of these scenarios is more efficient considering accuracy and time-computation. Hydrodynamic models are provided by HydWind, atomic data was obtained from CMFGEN database and fluxes are provided by Kurucz. Values for mass-loss rate and terminal velocity obtained from our calculations are also presented, comparing them with those measured in observational surveys.

We also examine how far change the solutions when effects of ionisation density are reckoned in ( $\delta$ -slow solutions). As first conclusion, we observe that range of optical depth where acceleration is calculated becomes important in order to separate fast and  $\delta$ -slow results.