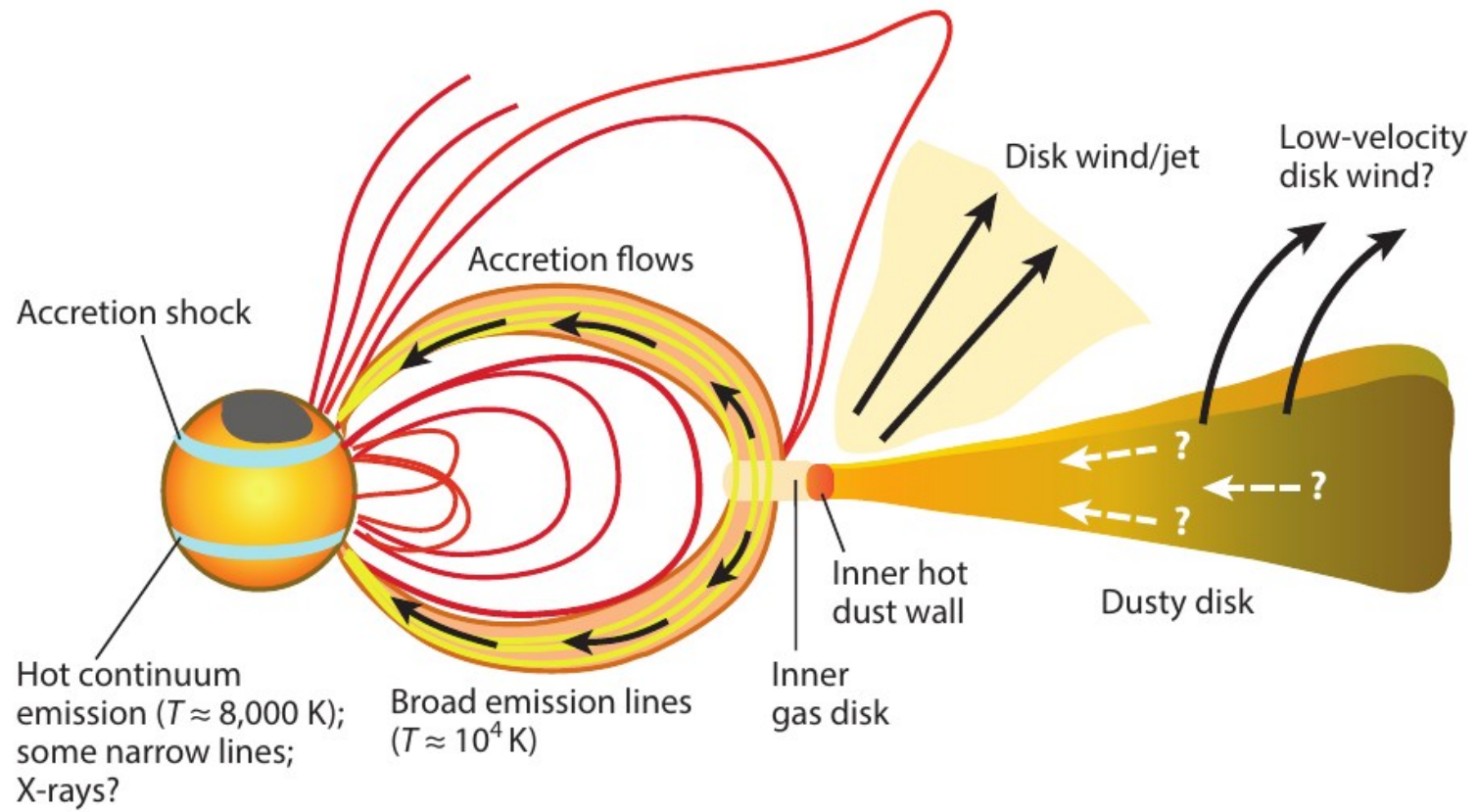
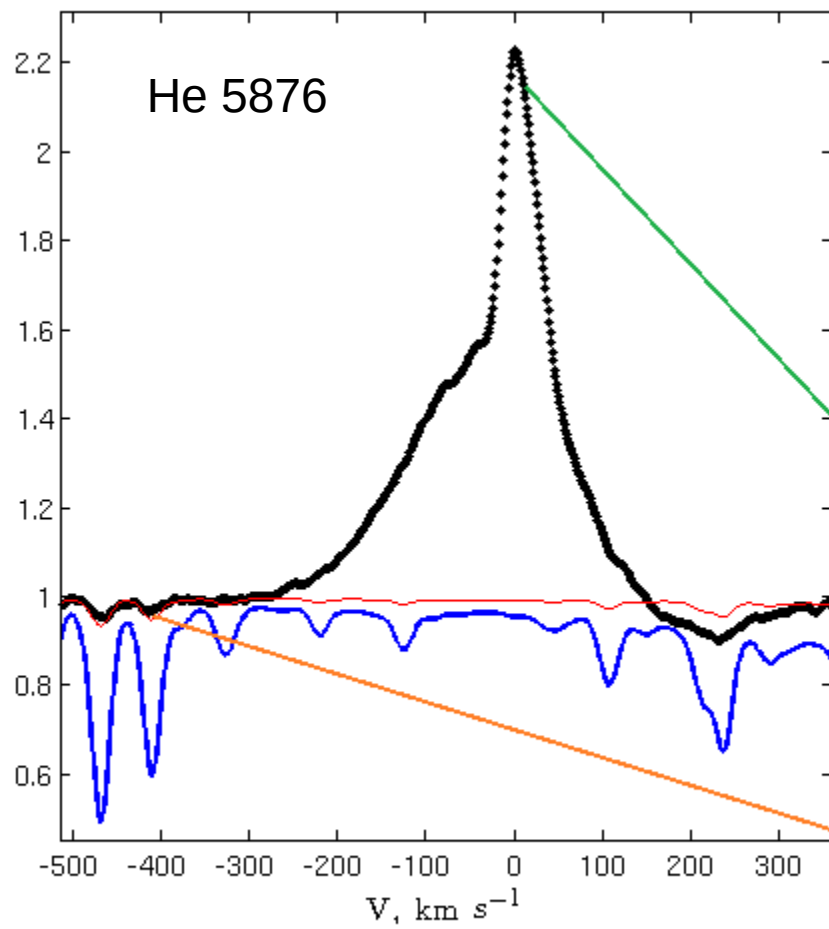
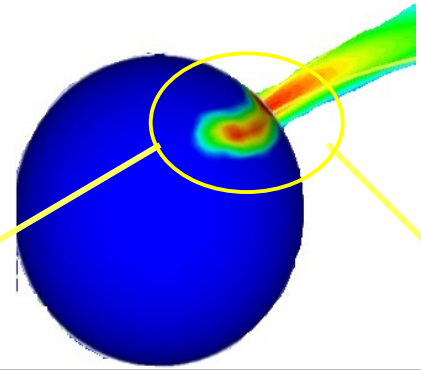


Оптическое излучение основания аккреционной колонки у звезд типа Т Тельца.

(2018MNRAS.475.4367D)

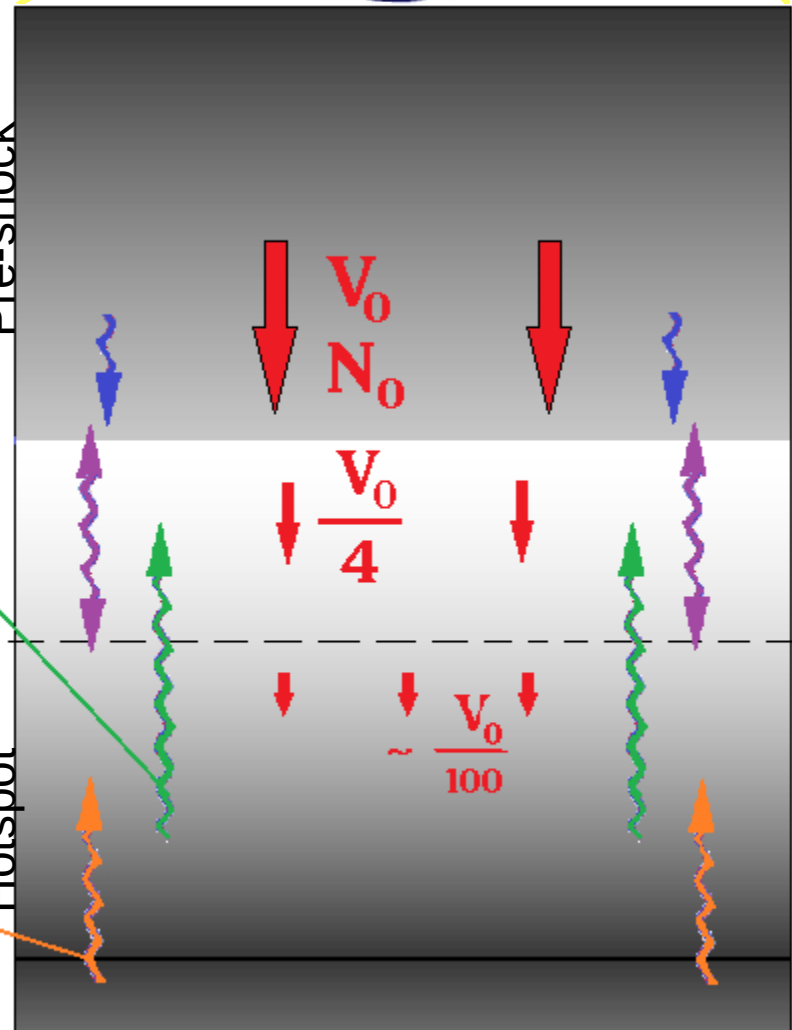
Додин А.В.
ГАИШ МГУ

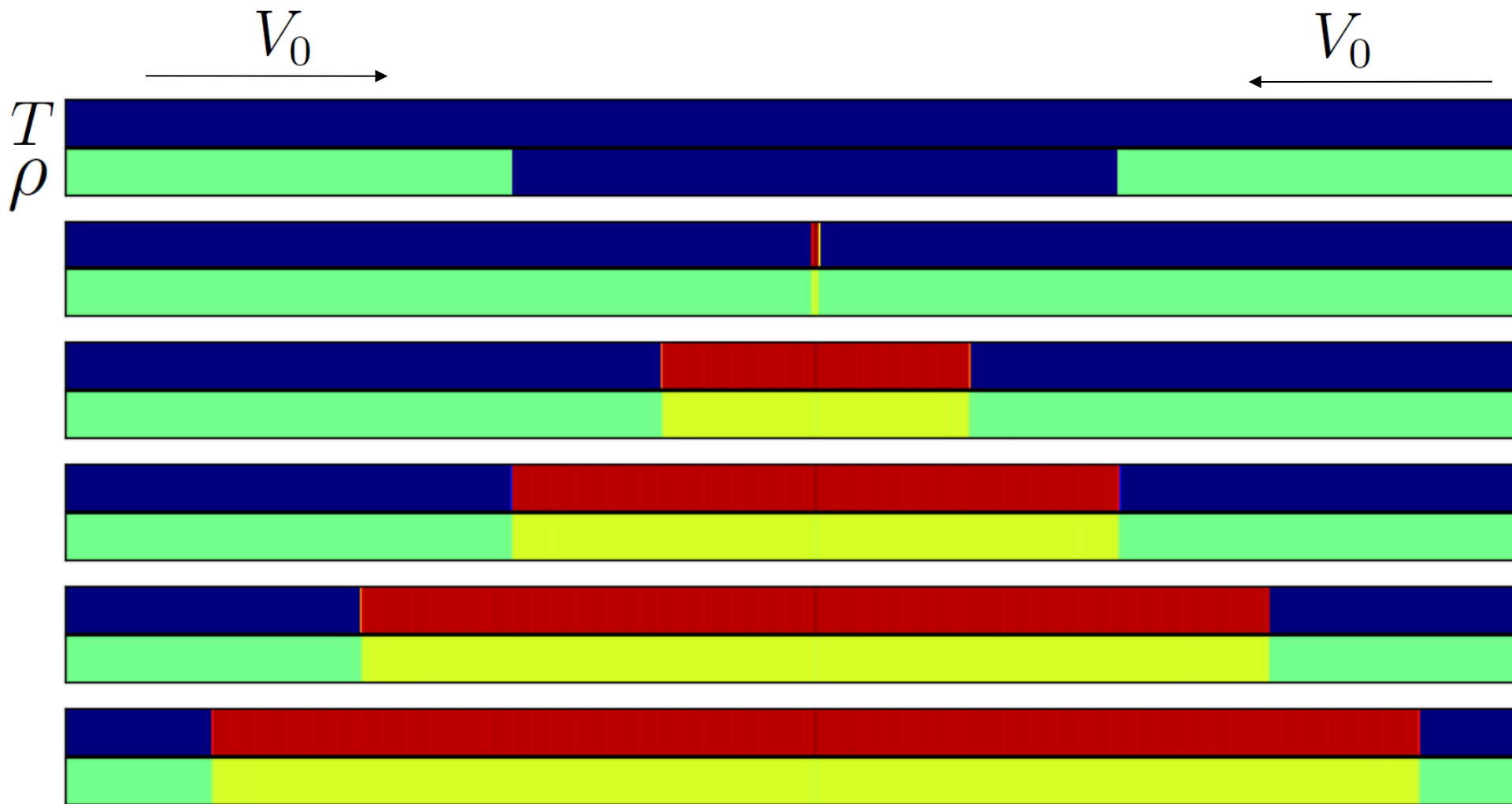




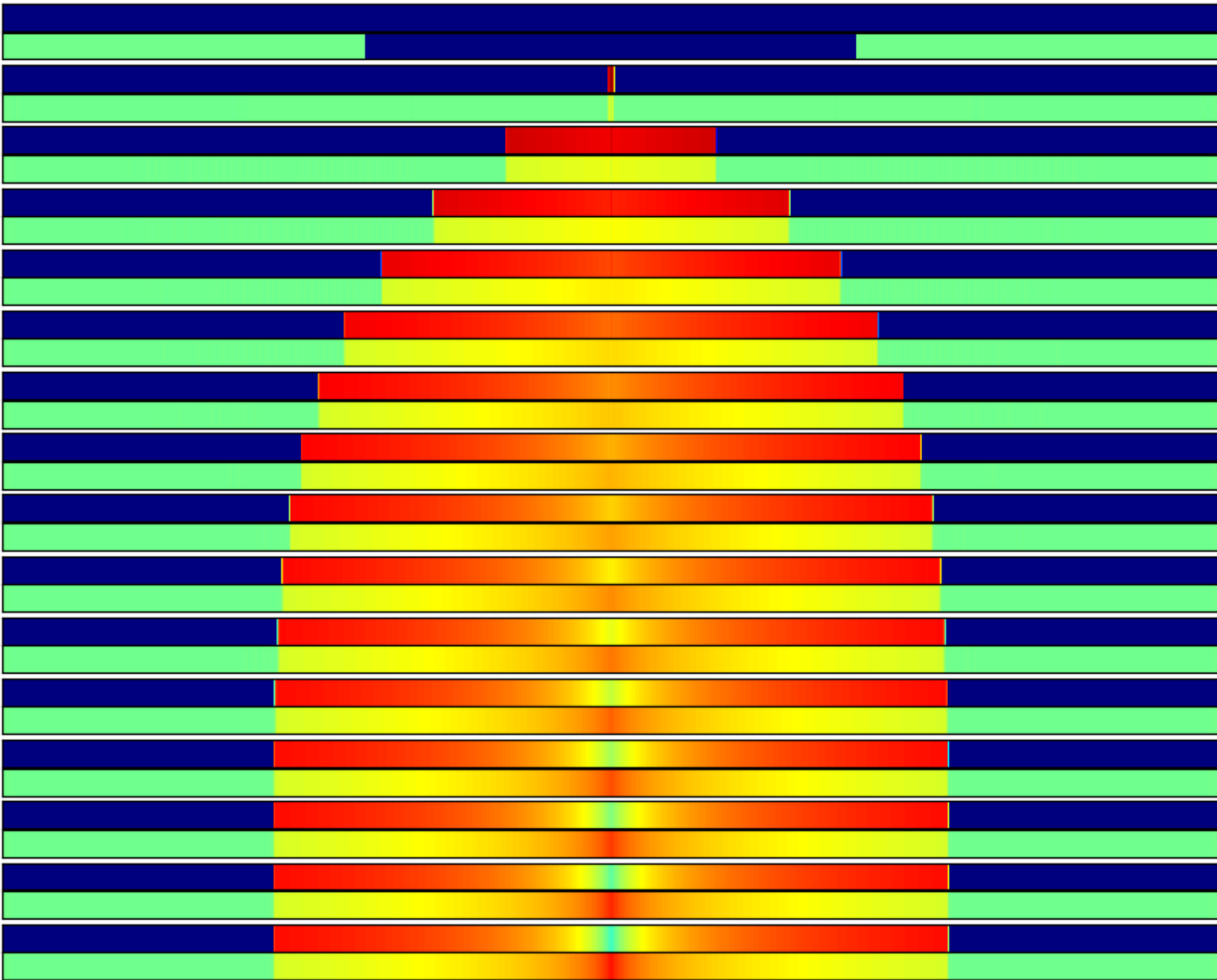
Pre-shock

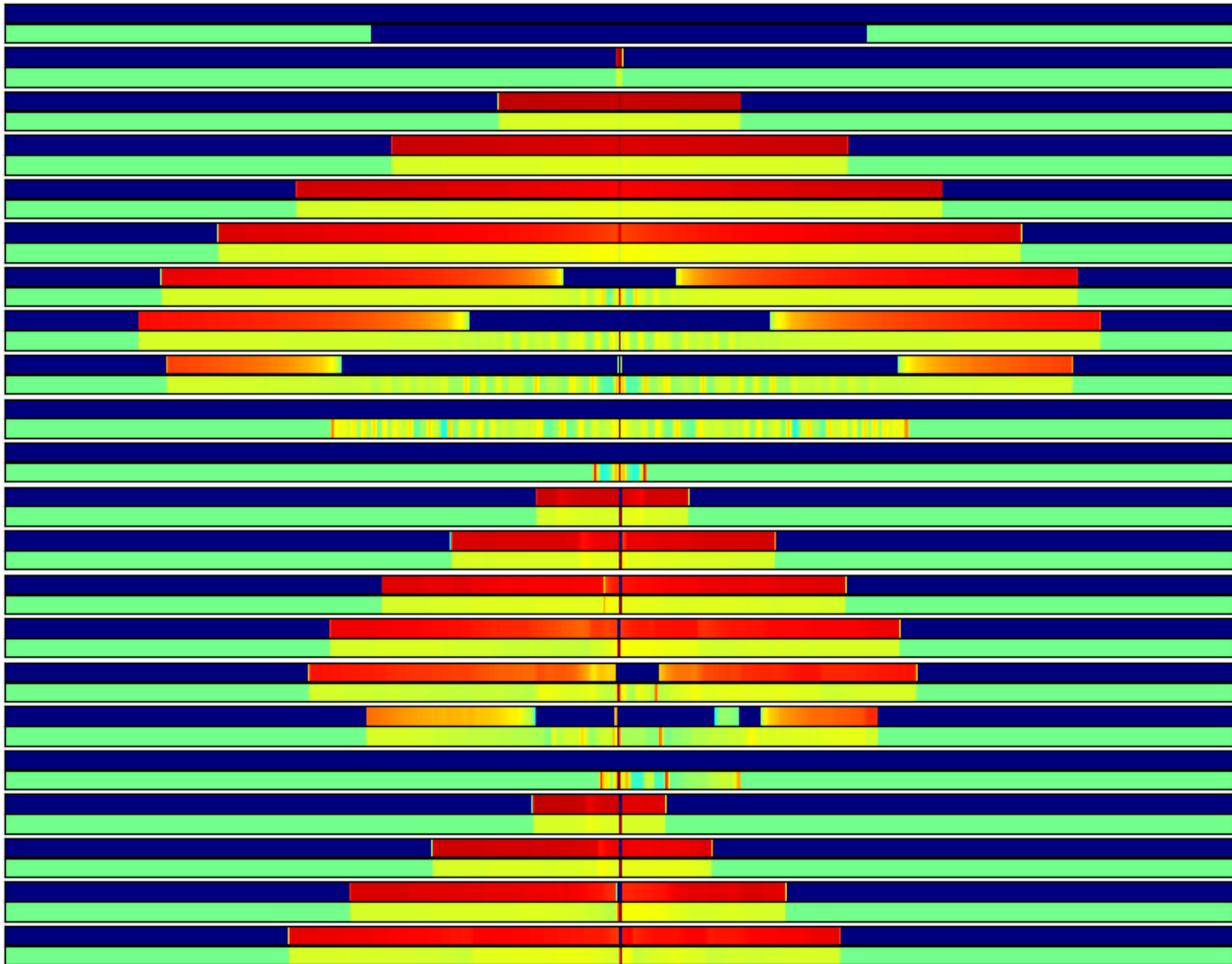
Hotspot

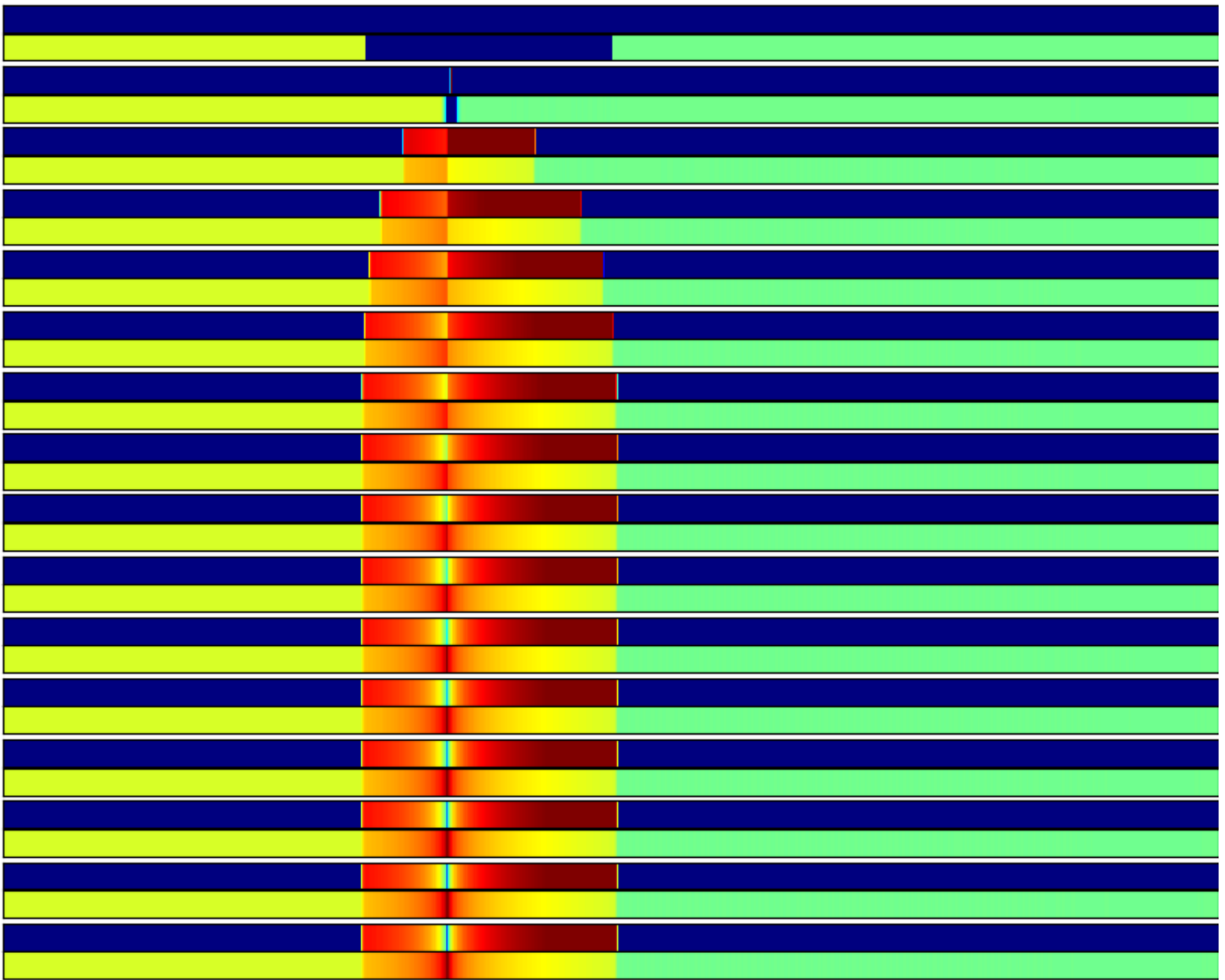


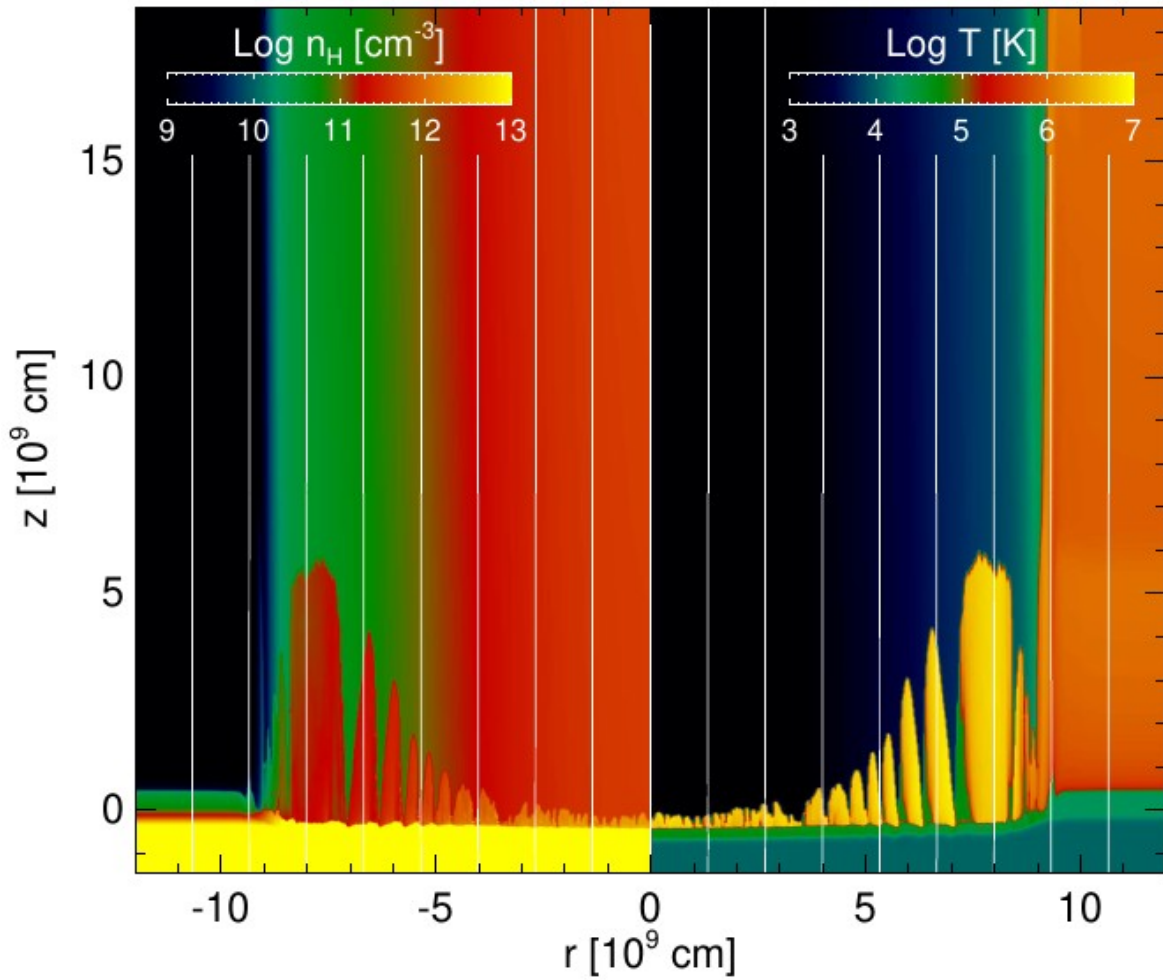


$$V_{\text{out}} = \frac{V_{\text{in}}}{4} \quad T_{\text{out}} \propto \frac{P_1}{\rho_1} = \frac{3}{16} V_{\text{in}}^2 \quad V_{\text{in}} = \frac{4}{3} V_0$$

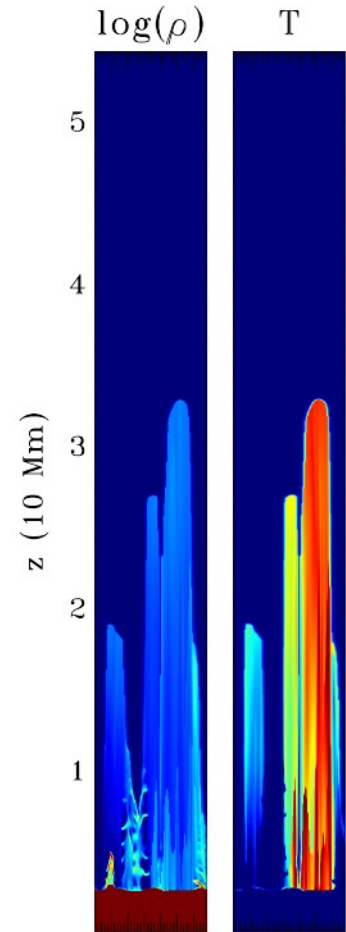




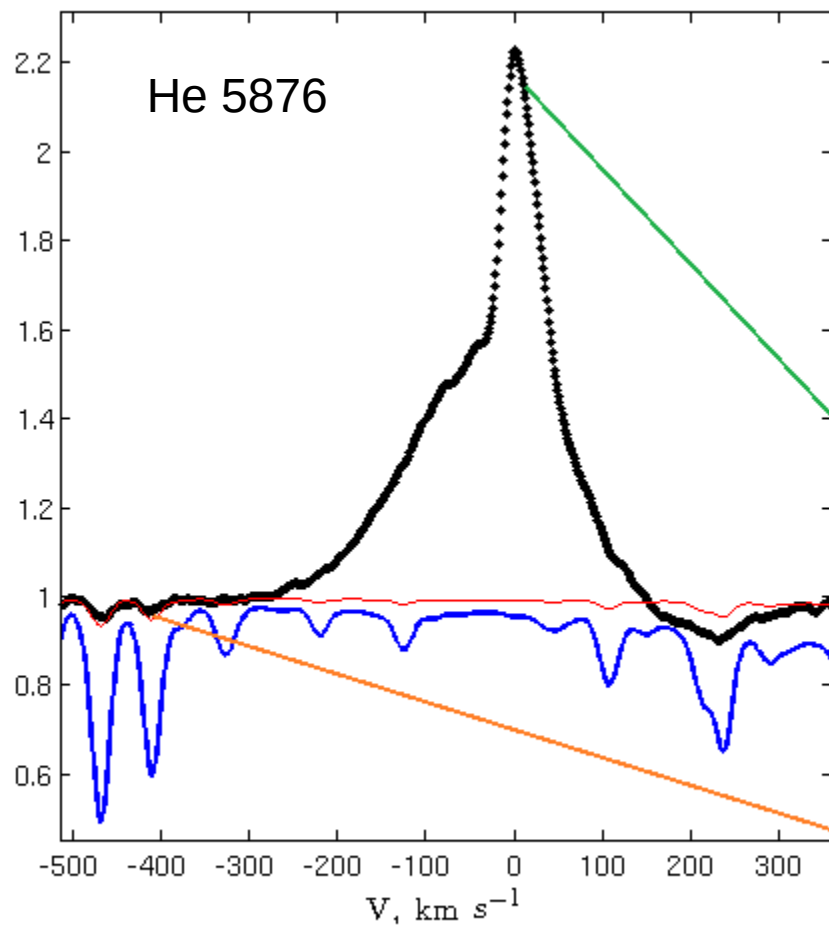
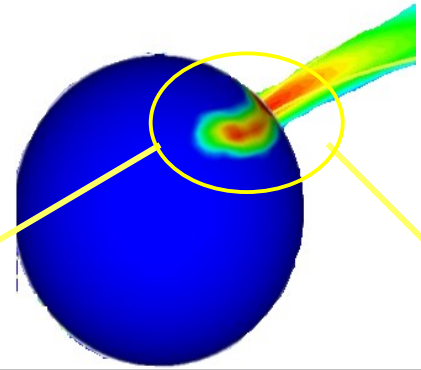




Orlando et al., 2014

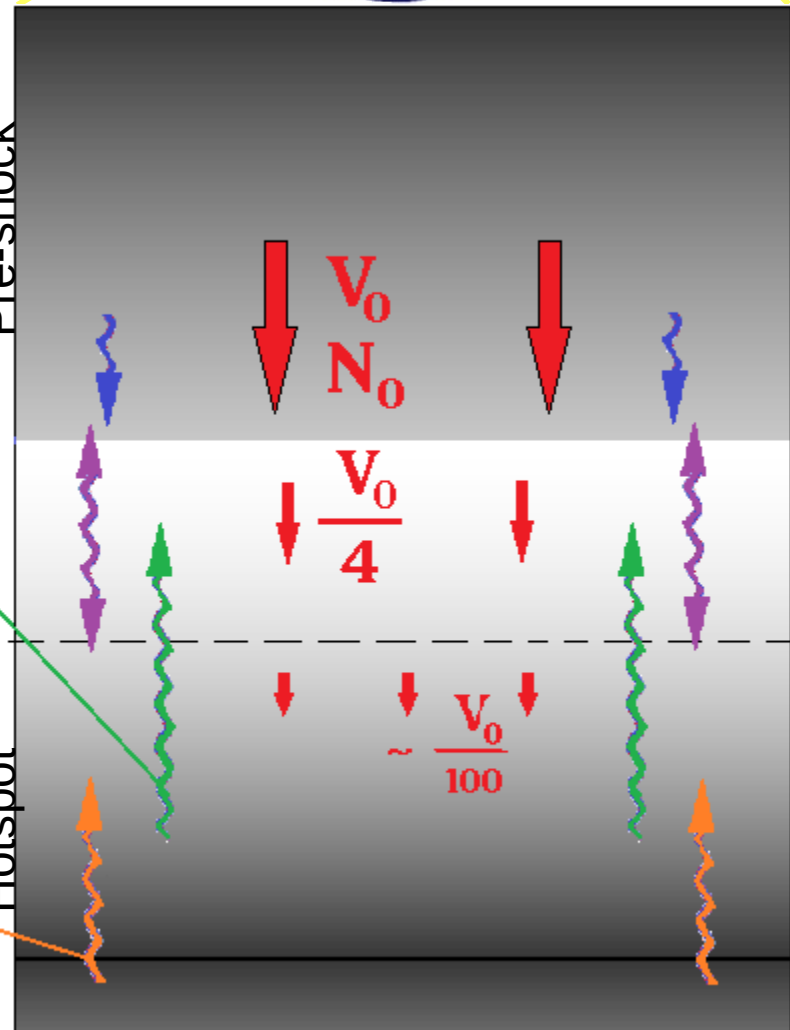


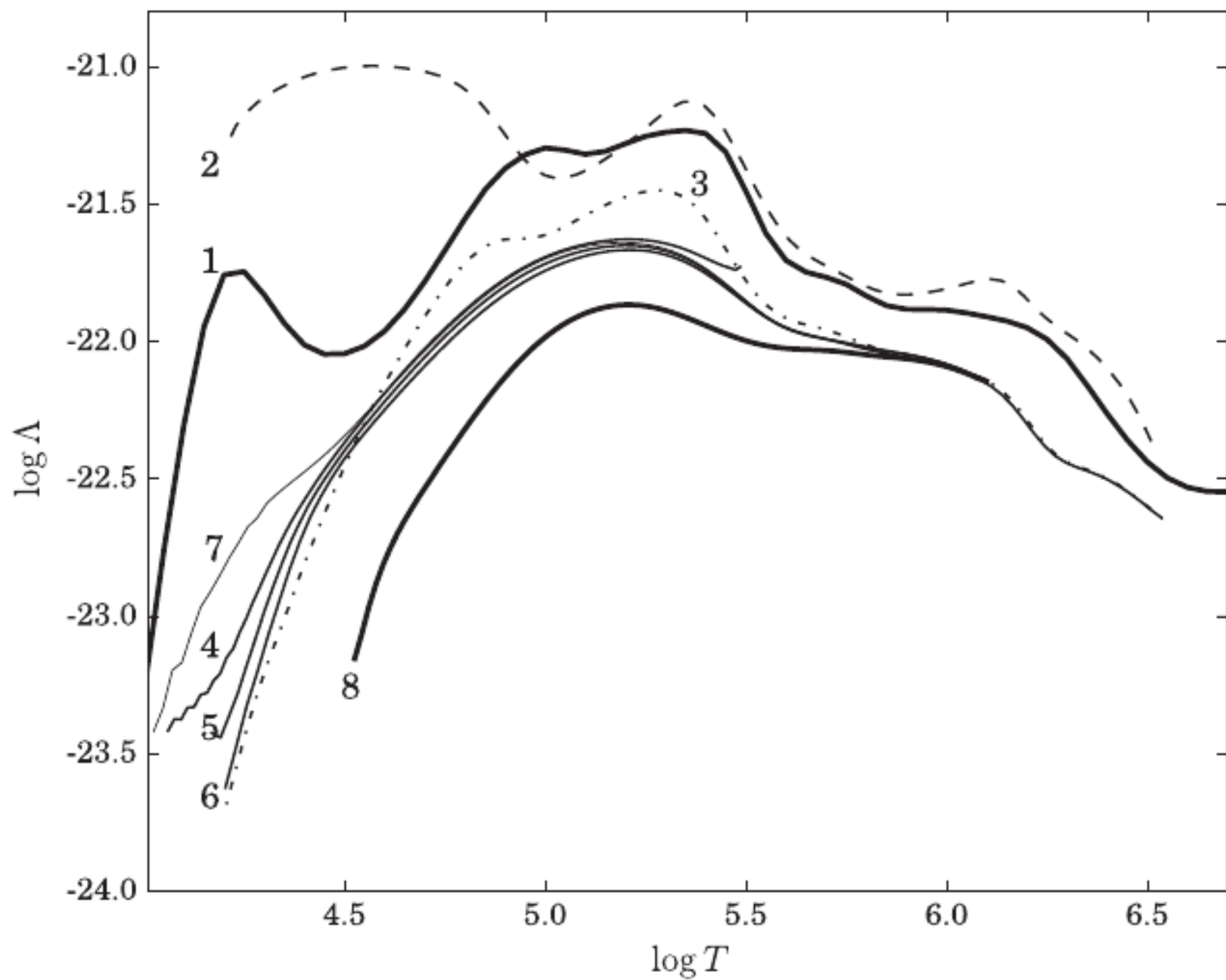
Matsakos et al., 2013



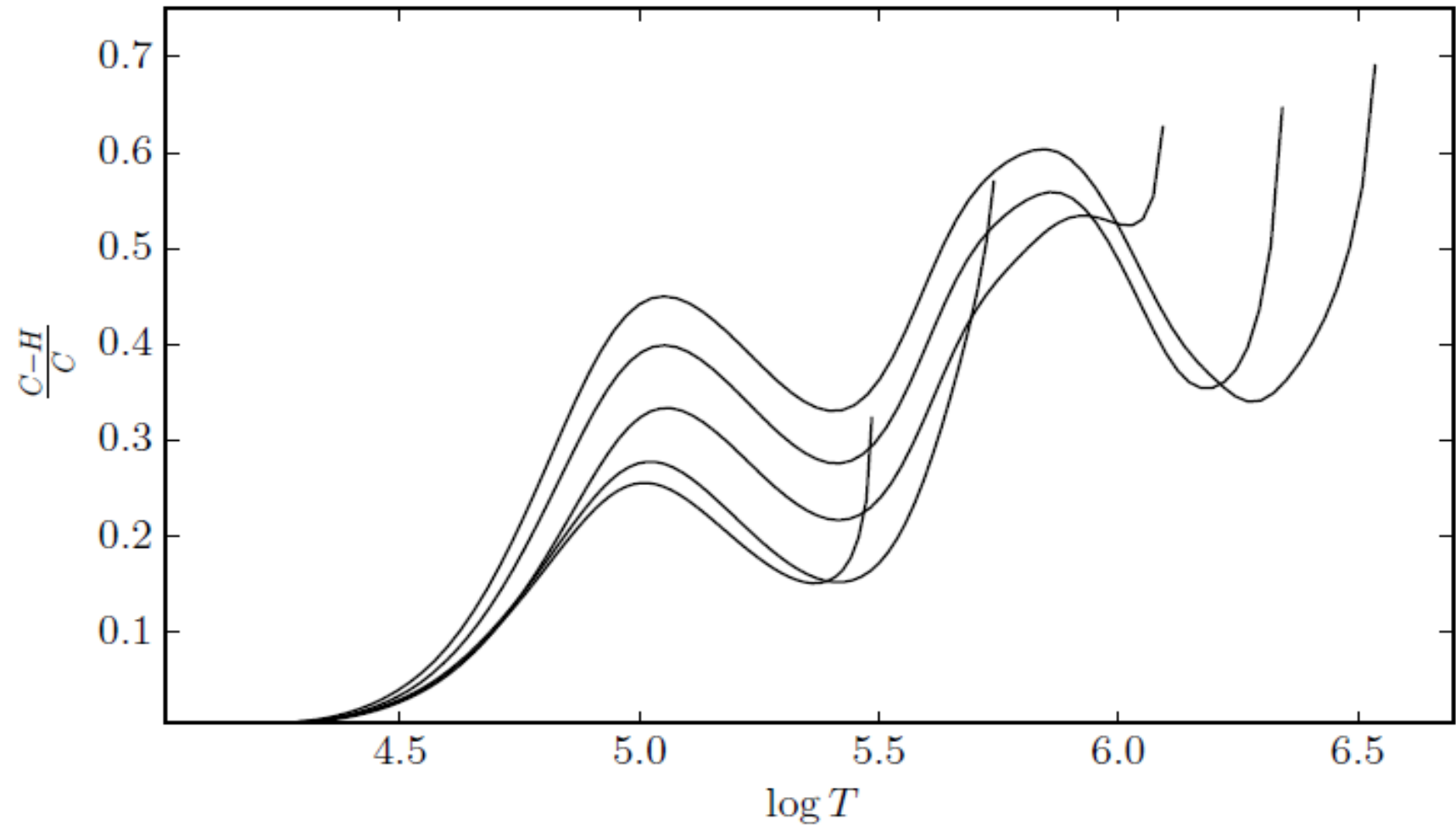
Pre-shock

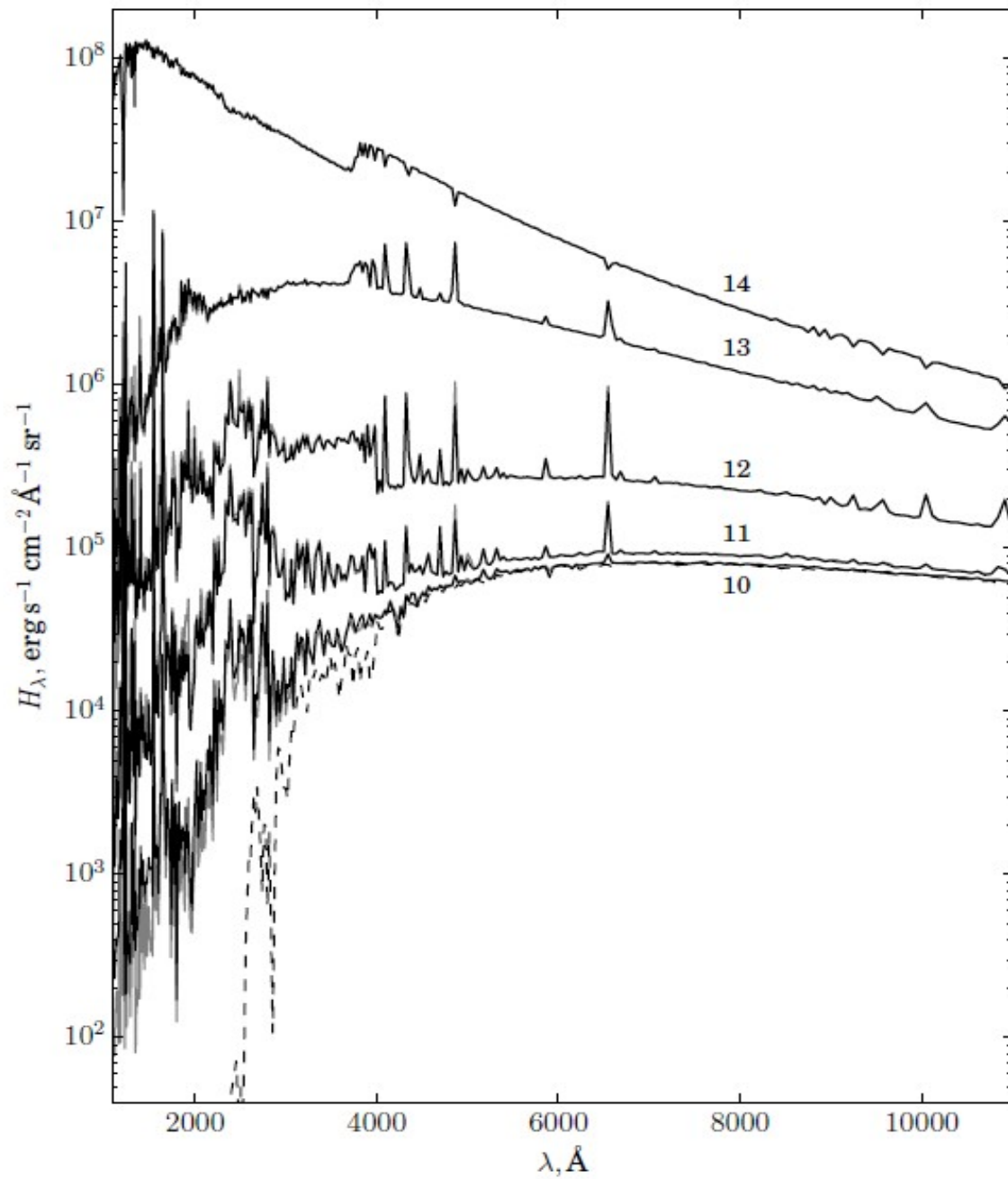
Hotspot



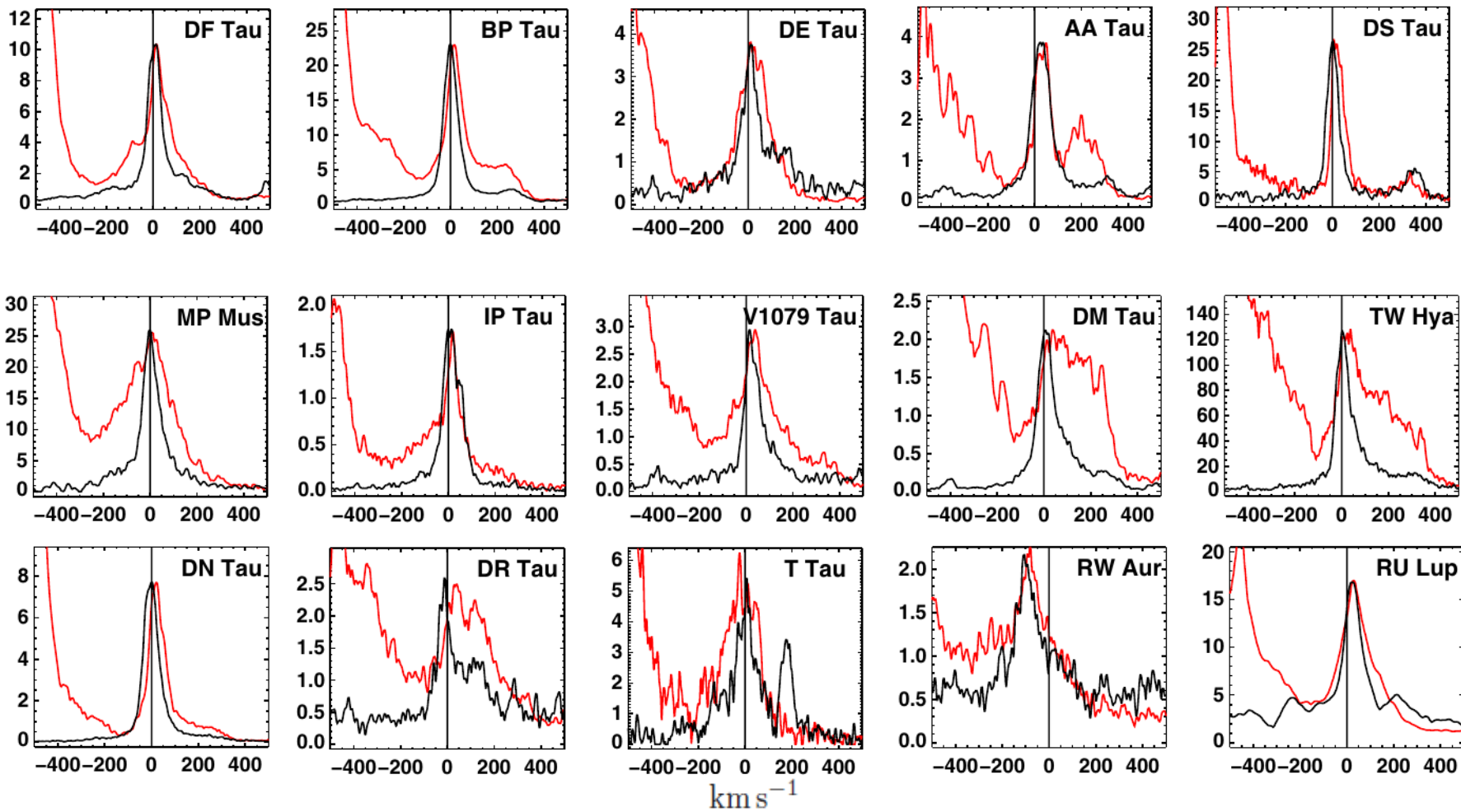


Роль нагрева за фронтом ударной волны

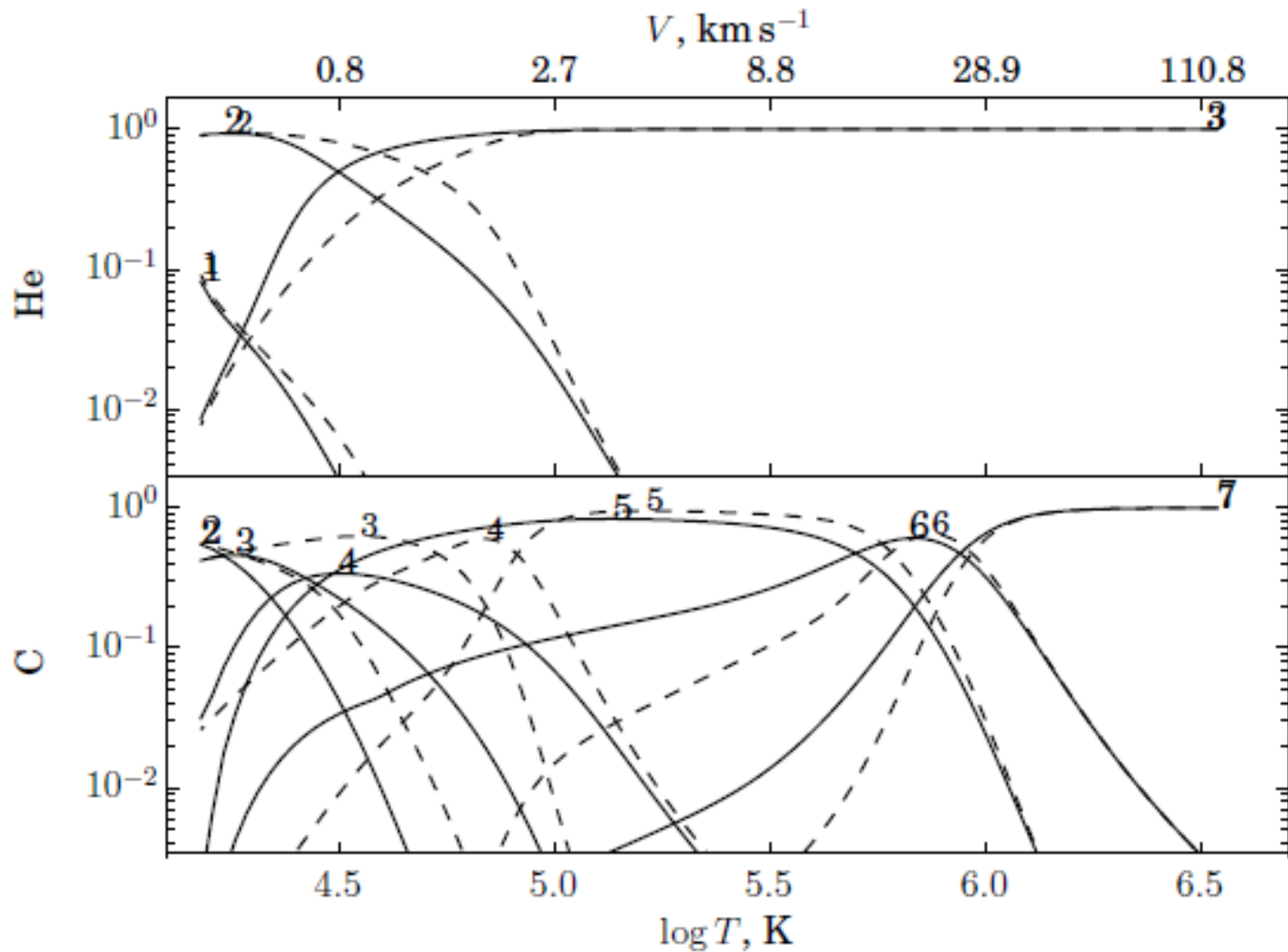




He II, C IV

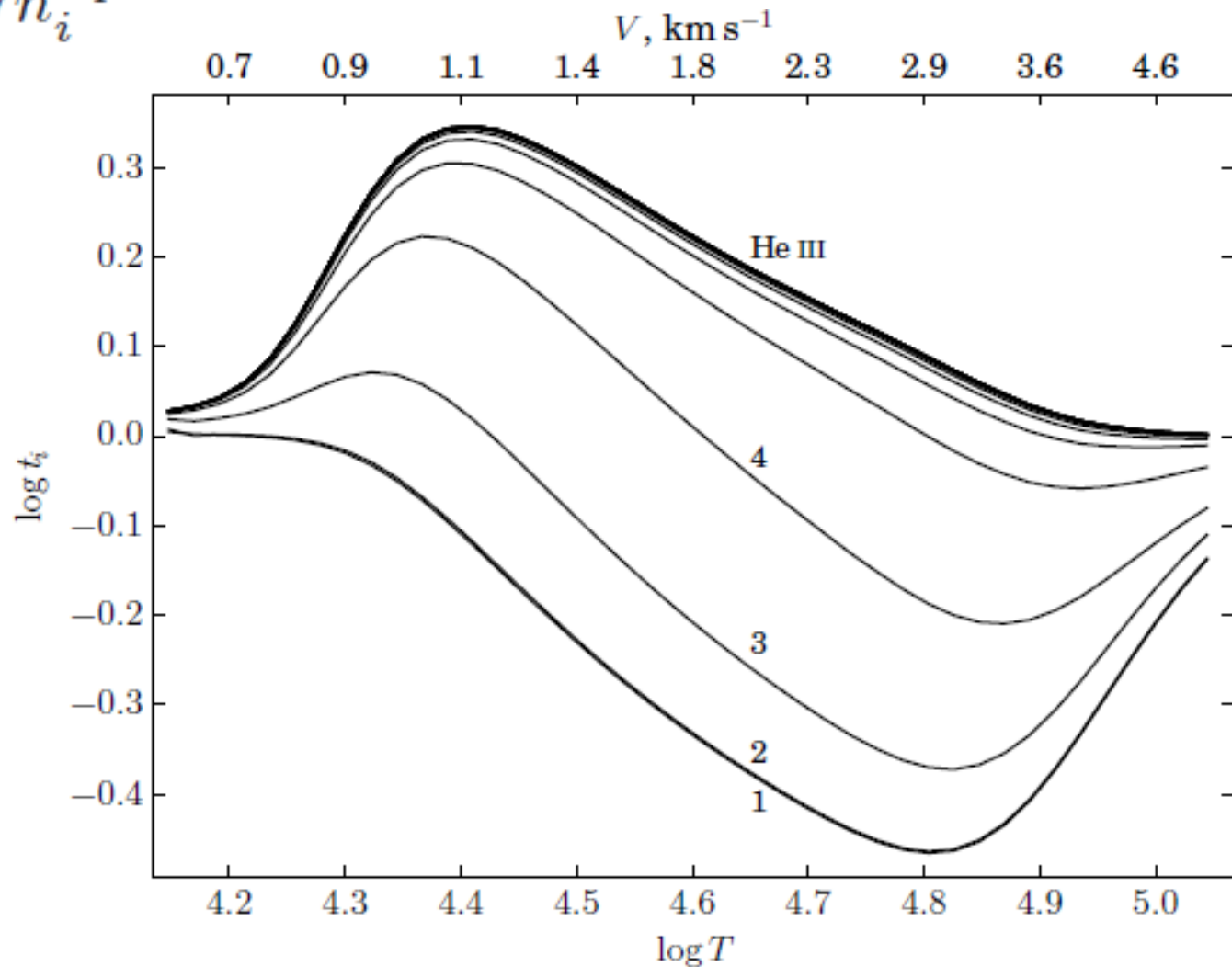


Узкие компоненты должны стоять на нулевой скорости

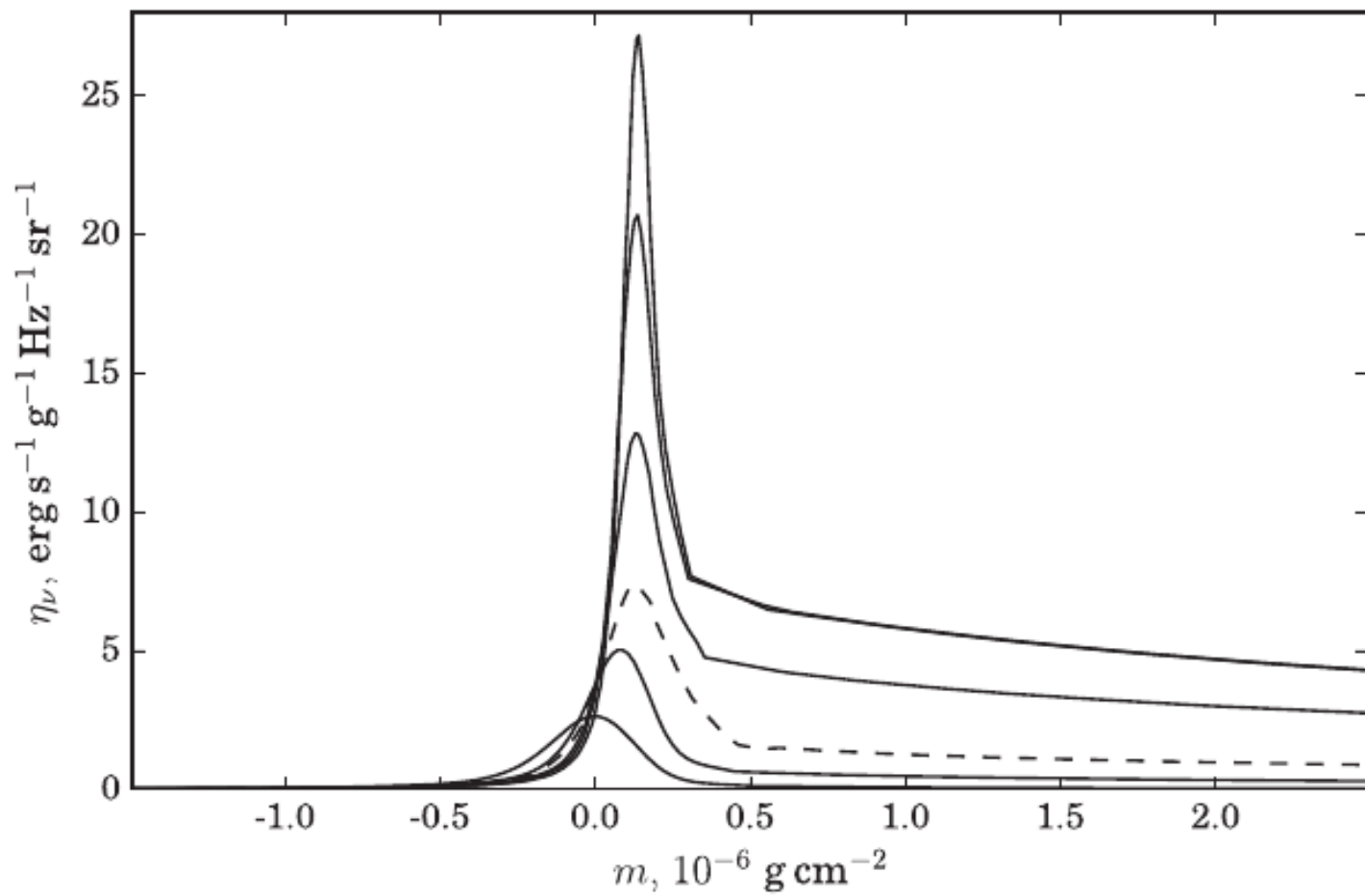


$$u_0 \frac{dn_i}{dm} = \sum_{j=1}^K (R_{ji} + C_{ji}) n_j - n_i \sum_{j=1}^K (R_{ij} + C_{ij}),$$

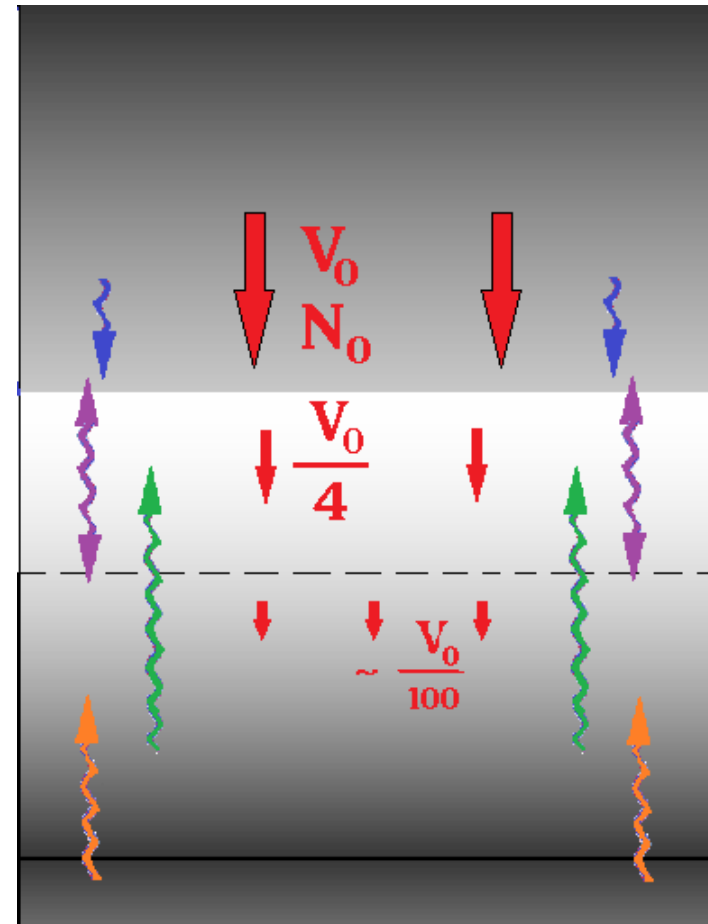
$$t_i = n_i^{\text{neq}} / n_i^{\text{eq}}$$



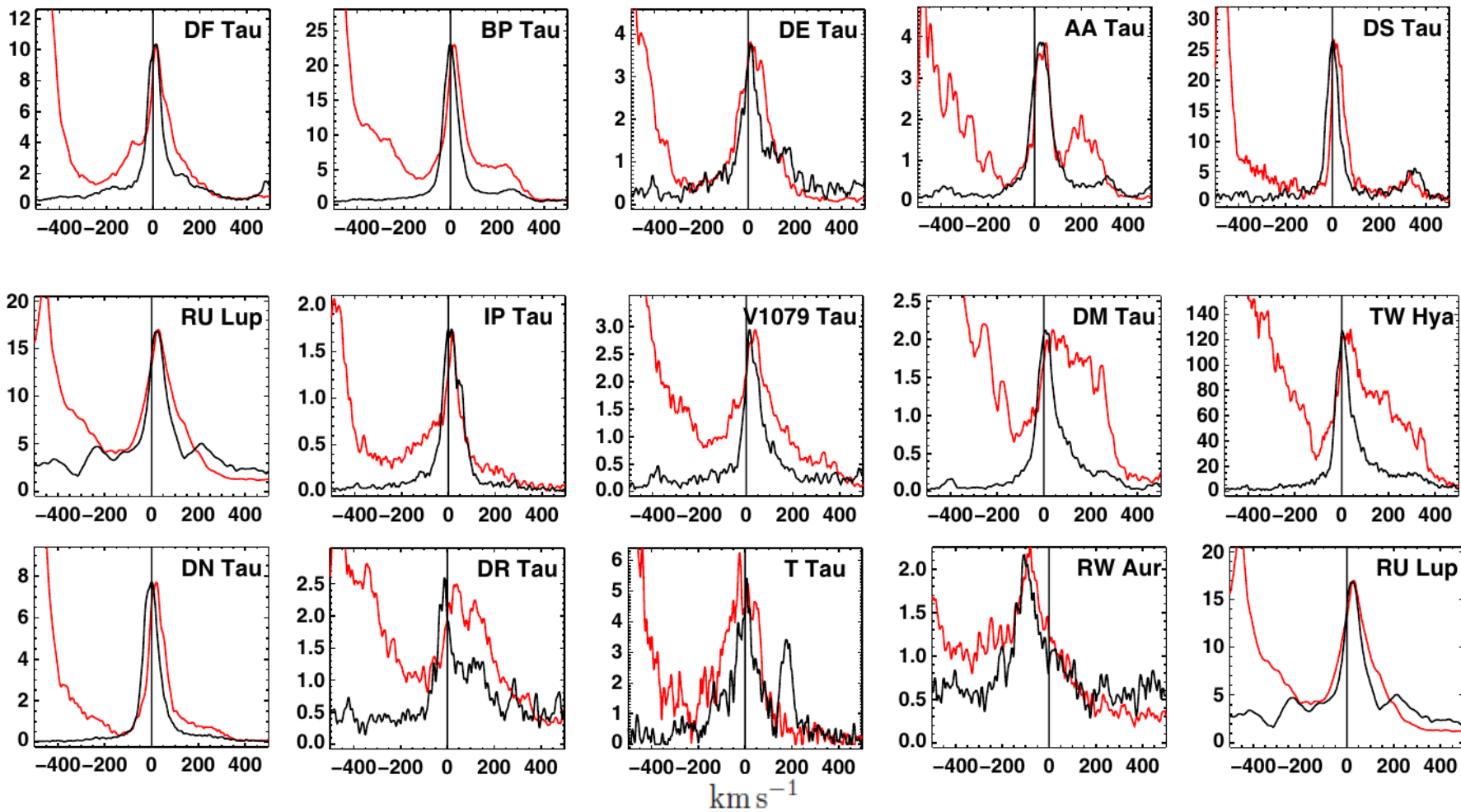
Линии HeII формируются при $v < 2$ км/с ($m > 0$)



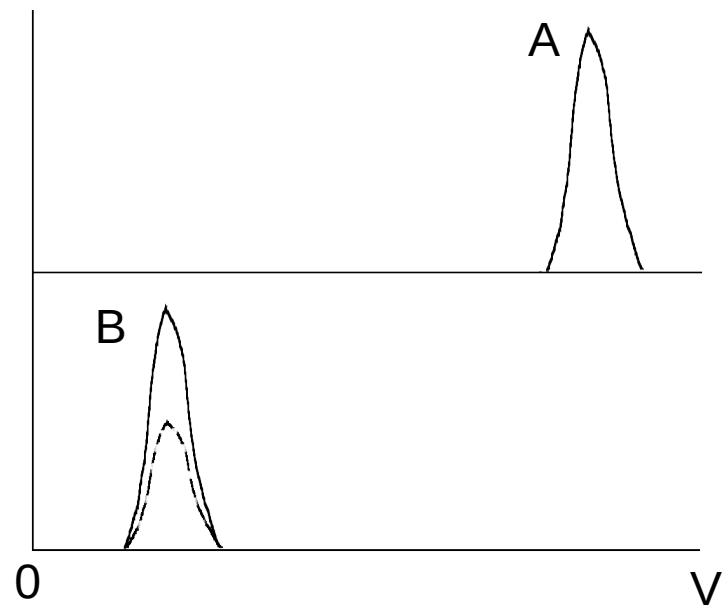
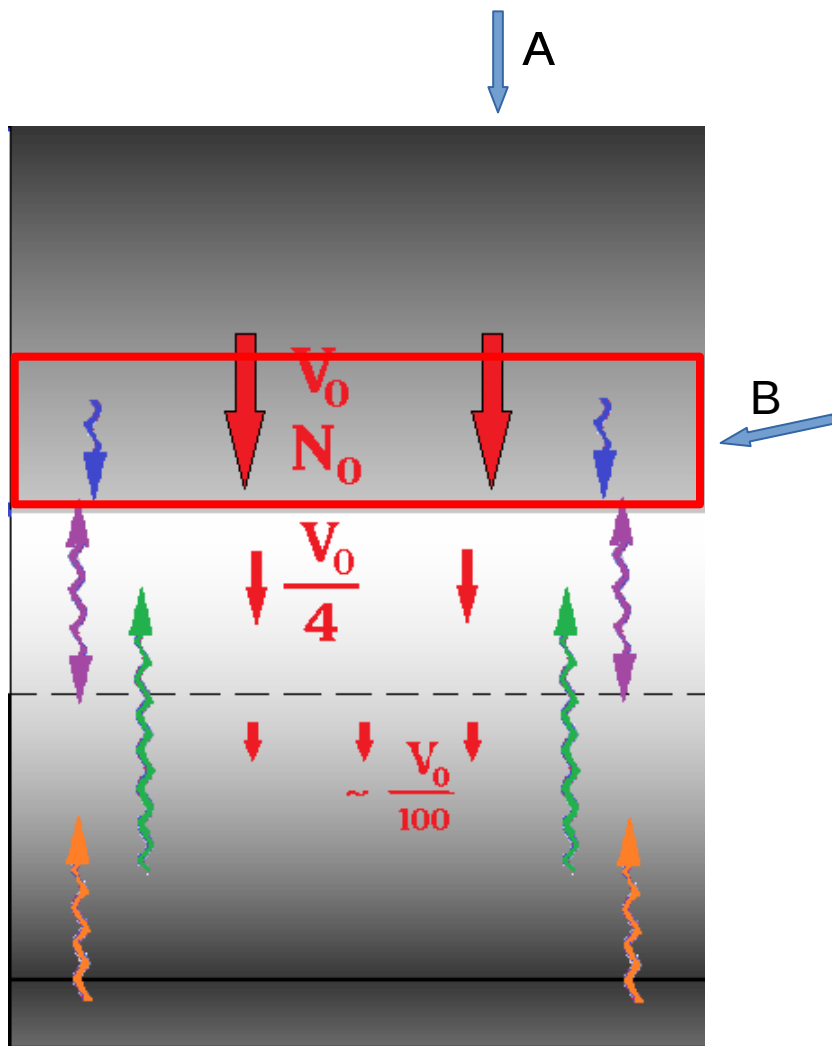
Горячее пятно и падающий газ в равной степени облучаются ударной волной: линии должны быть двухкомпонентны.

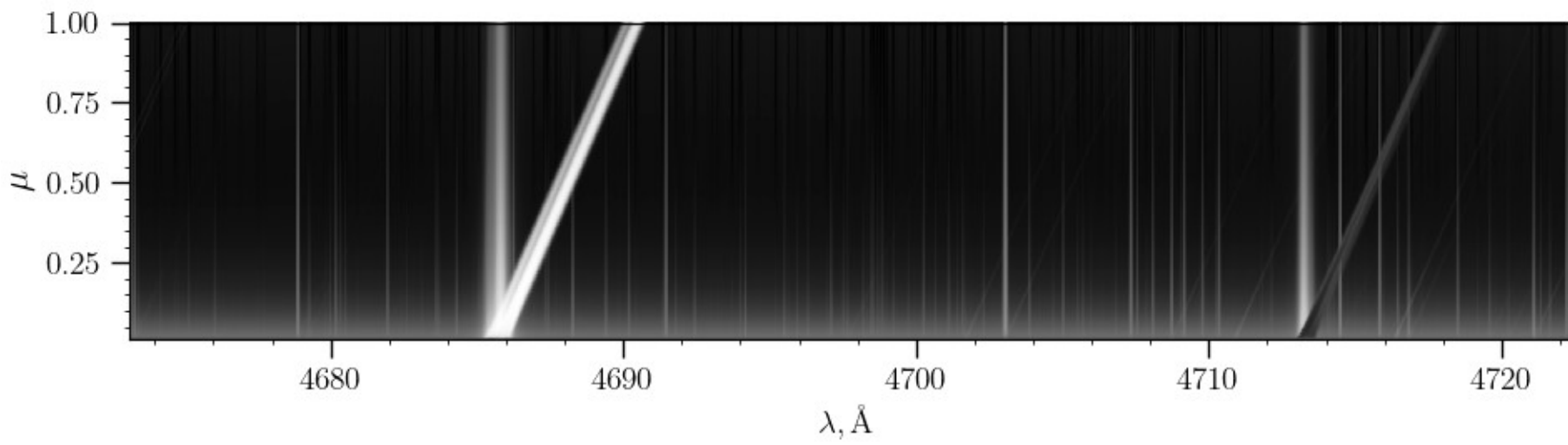


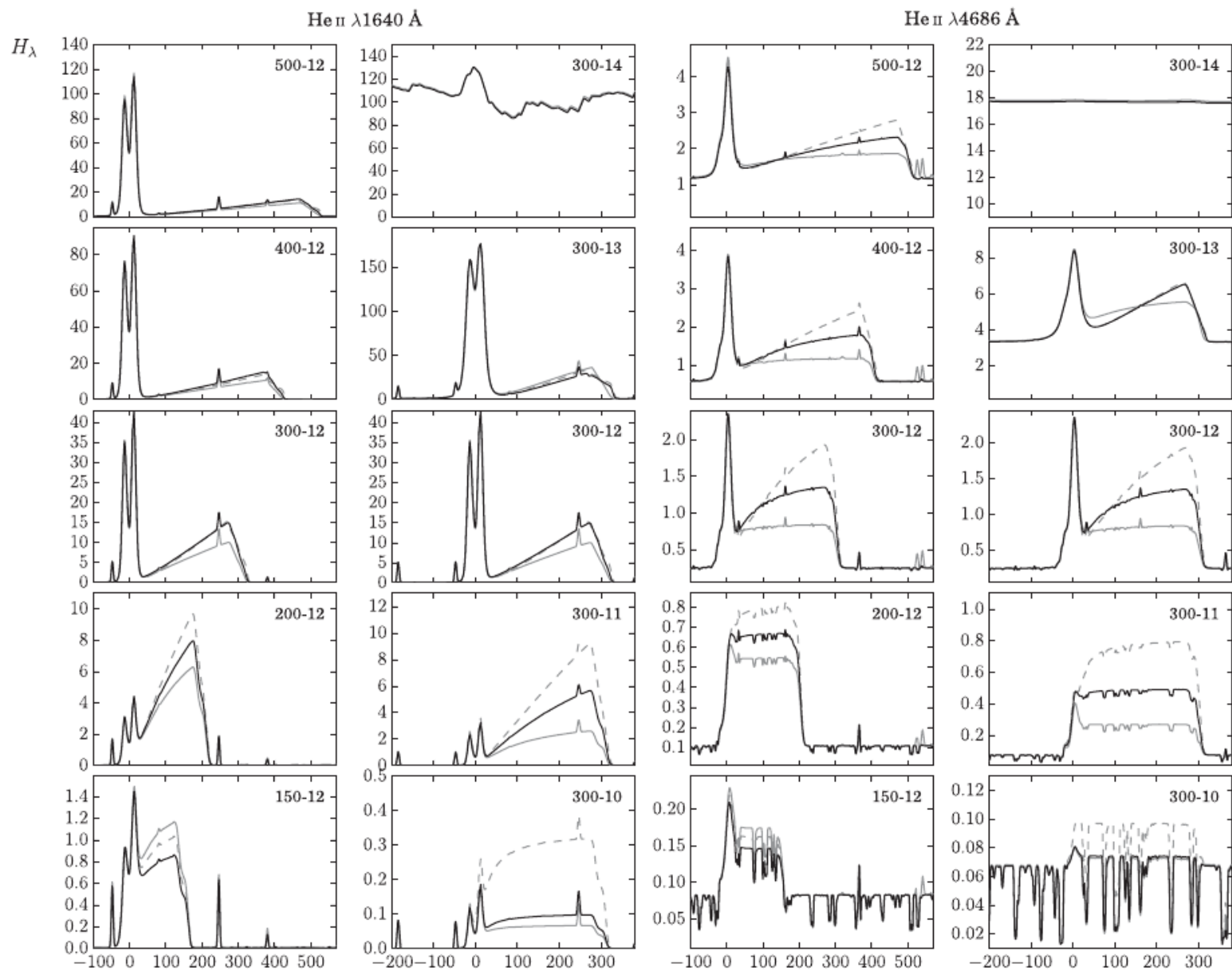
He II, C IV



Профиль красного компонента, максимум интенсивности должен быть на максимальной скорости, а наблюдается наоборот.







He II 1640

