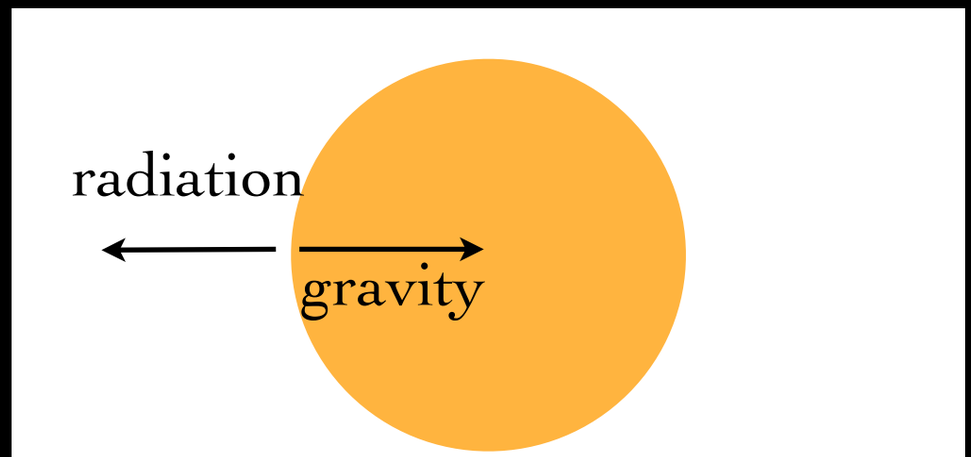
Luminous Blue Variables

Eddington luminosity: maximum luminosity where radiation force balances gravitational force



star in hydrostatic equilibrium

luminosity:

- M_{bol} ~ -11 to -8
- near Eddington limit

$$L_{\mathrm{Edd}} = \frac{4\pi G M m_{\mathrm{p}} c}{\sigma_{\mathrm{T}}}$$

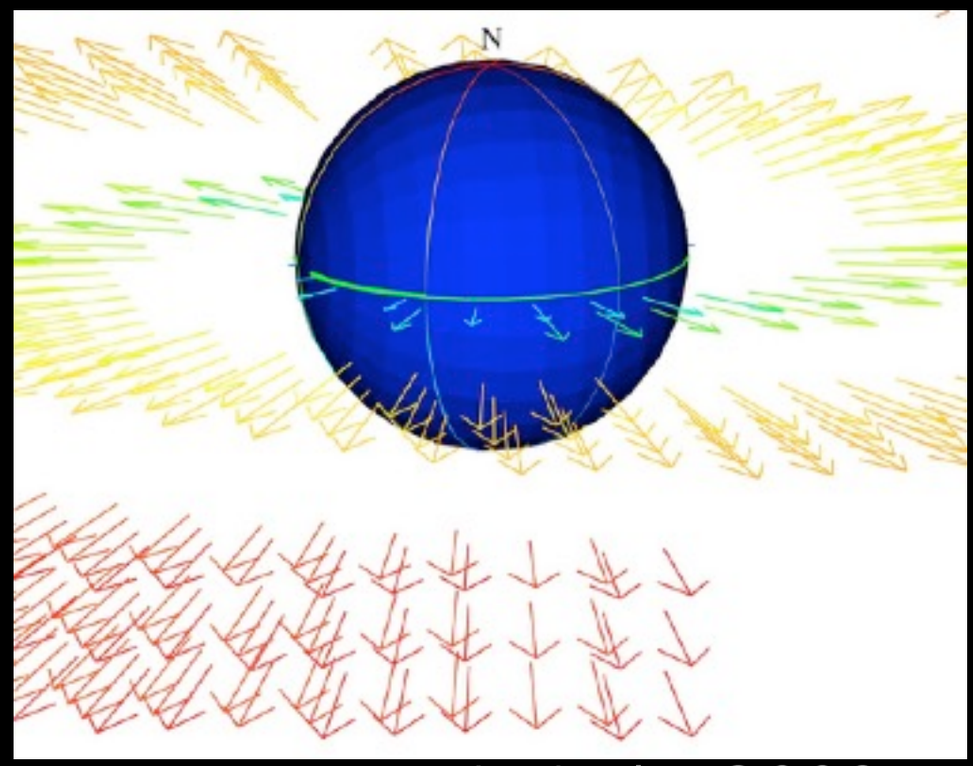
$L_{\mathrm{Edd}} \sim L_{\mathrm{Edd}}\,(\mathrm{M,T})$

$\frac{m_p}{\sigma_T}$ is the opacity of the stellar material

light echoes of η-Carinae

Luminous Blue Variables

Eddington luminosity: maximum luminosity where radiation force balances gravitational force



Lobel+ 2008

luminosity:

- M_{bol} ~ -11 to -8
- near Eddington limit

$$L_{\rm Edd} = \frac{4\pi G M m_{\rm p} c}{\sigma_{\rm T}}$$

$L_{\rm Edd} \sim L_{\rm Edd}$ (M,T)

$\frac{m_p}{\sigma_T}$ is the opacity of the stellar material