

Comments and questions around PLATO limb darkening calculations

What accuracy is needed for the LD curve?

Do we really need the 0.3%?? (Szilard Csizmadia)

3D: average thermal gradient better. Good enough? It seems so (cf. residuals transits, Remo Collet)

impact of spots?

impact of granulation? Can we characterize this using interferometric observations / models? (Roxanne Ligi)

impact of abundances? (Alexander Shapiro)

We need more LD observational determinations!

initial calculations:

- 500-1000nm, $R \approx 300\,000$, or broader wavelength range?
- how many angles? Is 0.1, ..., 1.0, with 0.1 step sufficient?

final product:

- only average CLV over 500-1000nm PLATO passband?
- what kind of fit (i.e. LD coefficients) through this data, if any? => power-2 law (Pierre Maxted)
- Or rather: use directly the intensity profile (Denis Mourard)