Building a 3D extinction model

A)

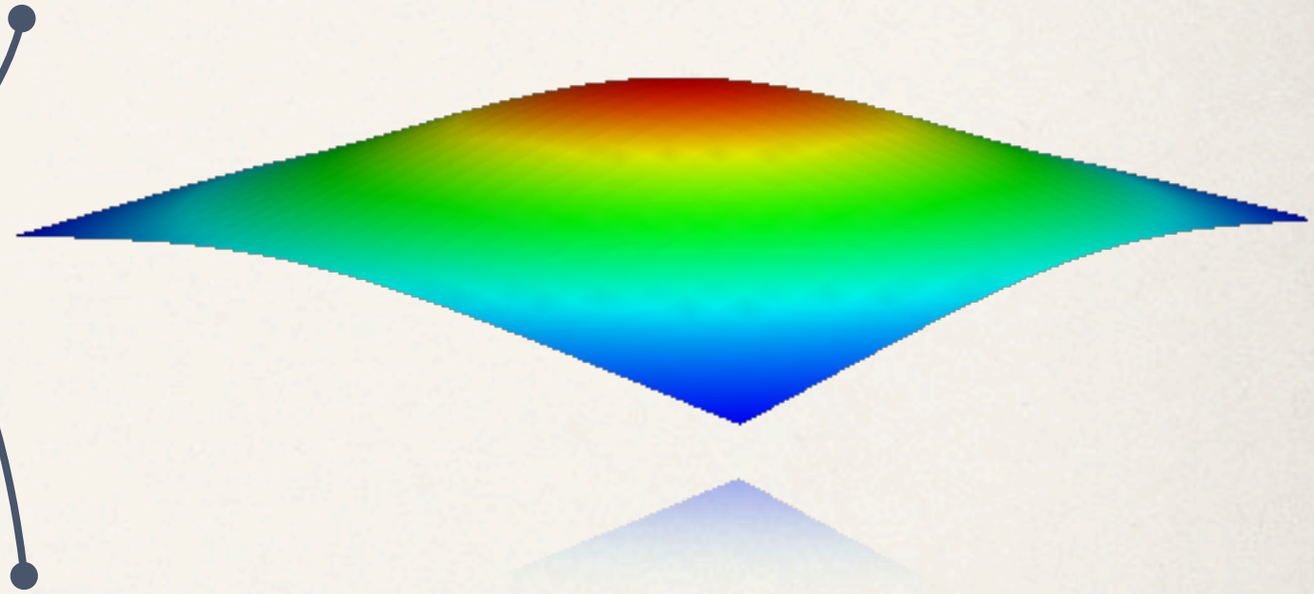
use multi-band photometry to solve for multiple APs

↓

impose self-consistency

parametrized dust model

$$\rho \simeq \rho_0 \exp\left(-\frac{R}{a_R} - \frac{|z|}{a_z}\right)$$

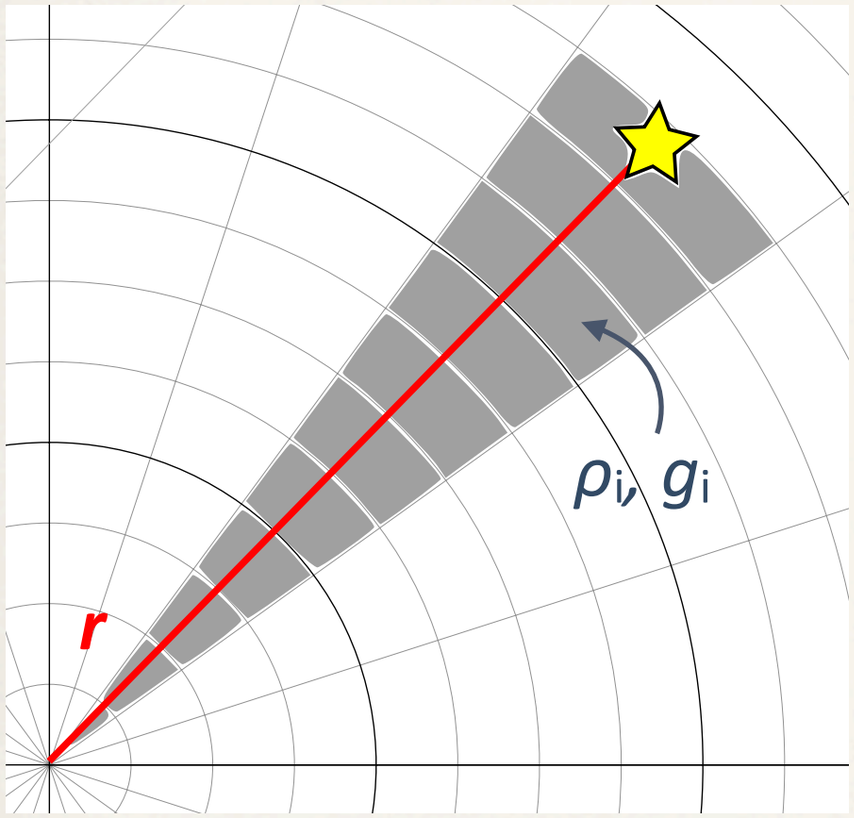


use A_0, T_{eff}, *(l,b,ω)* to build a forward model in Bayesian framework

Building a 3D extinction model

B)

use multi-band photometry to solve for multiple APs



impose self-consistency

non-parametrized dust model

$$A = \kappa \int \rho \, \mathrm{d}s \simeq \kappa \sum \rho_\mathrm{i} \, g_\mathrm{i}$$

use A_0, T_{eff}, (l,b,ω) to build a forward model in Bayesian framework
use input from A) as initial values