Problem Set #4

Due 05 May 2024

Note, you are submitting all your problems as Jupyter notebooks, so make your code, figures and text readable in a single file.

1) Download the `mass_models_problem.ipynb` from the class website, follow the directions and questions outlined.

2) Download the `re_se_problem.ipynb` from the class website, follow the directions and questions outlined.

3) Design a χ^2 grid search script on an $r^{1/4}$ fit of an elliptical (see previous problem). Use the NGC7626 profile (at the class website) to find the best fit. Map the χ^2 space around the best fit. Comment on slope of the χ^2 contours with respect to the fit.

PHYS510 problem: Read Hogg+ (2018) (https://ui.adsabs.harvard.edu/abs/2018ApJS..236...11H/abstract) and do problems 1 and 2.