Using the LOWZ catalogue, we plot the luminosity-density profiles of individual galaxies, as well as the stacked profiles.

Get rid of galaxies with these flags: iflags\_pixel\_saturated\_center, iflags\_pixel\_edge, iflags\_pixel\_interpolated\_center, flags\_pixel\_cr\_center, iflags\_pixel\_suspect\_center, iflags\_pixel\_clipped\_any, iflags\_pixel\_bad. Galaxies flagged in these categories tend to produce outliers in the individual luminosity-density profiles, which changes the results of our stacked luminosity profile.

Our first test is to see whether the luminosity profiles of bright galaxies are affected by contamination from faint sources (possibly not deblended properly). LGRs separated into two categories: iflags.pixel.bright.object.center is True and False.

Macintosh HD:Users:amandanewmark:repositories:galaxy_dark_matter:lumprofplots:clumps:meanTF.pdf

Figure 1: stacked luminosity profile outside for each flagged (blue points) and not flagged (red points) populations. The magenta and cyan lines are the fitted logarithmic slopes of the stacked profiles.

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Initially, we notice the slope of the stacked flagged galaxy is outside one sigma of the mean slope for the luminosity profile. The individual galaxies appear to have shallower slopes than that of the stacked slope