

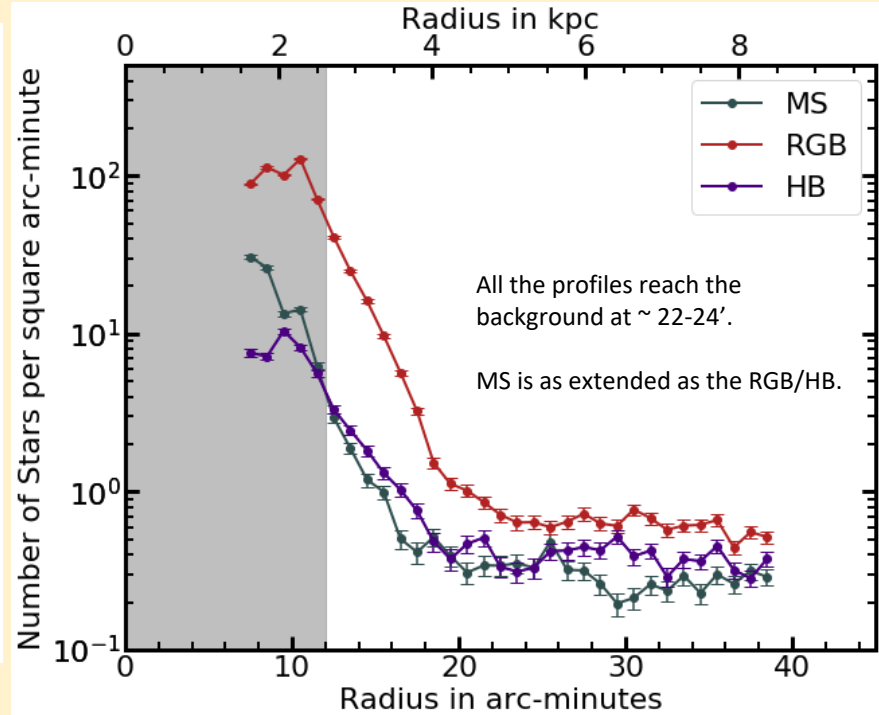
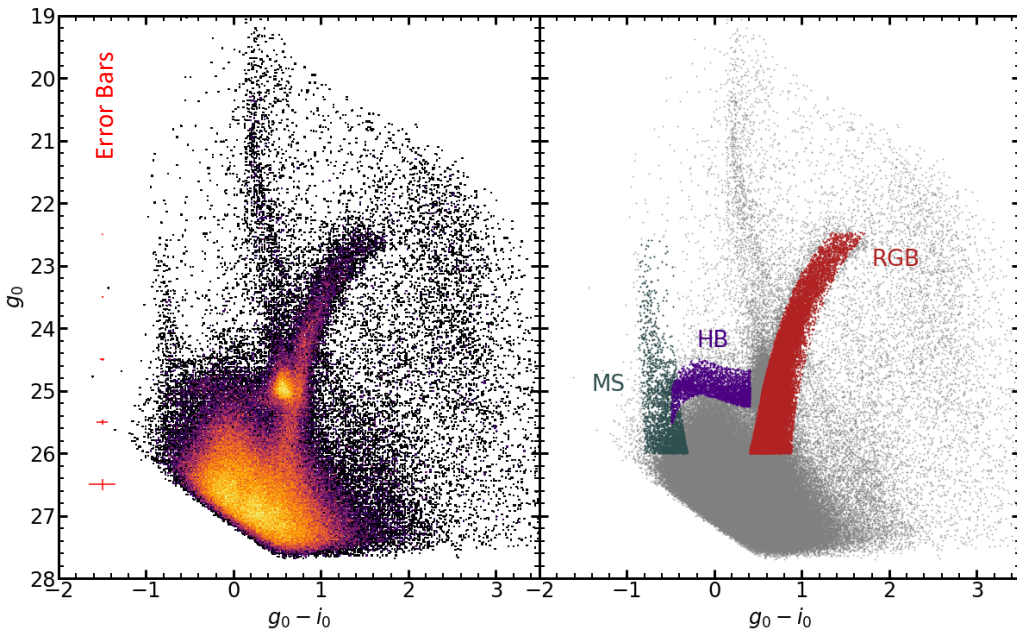
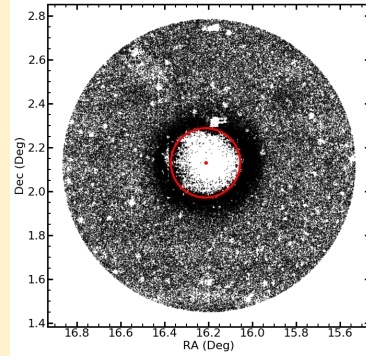


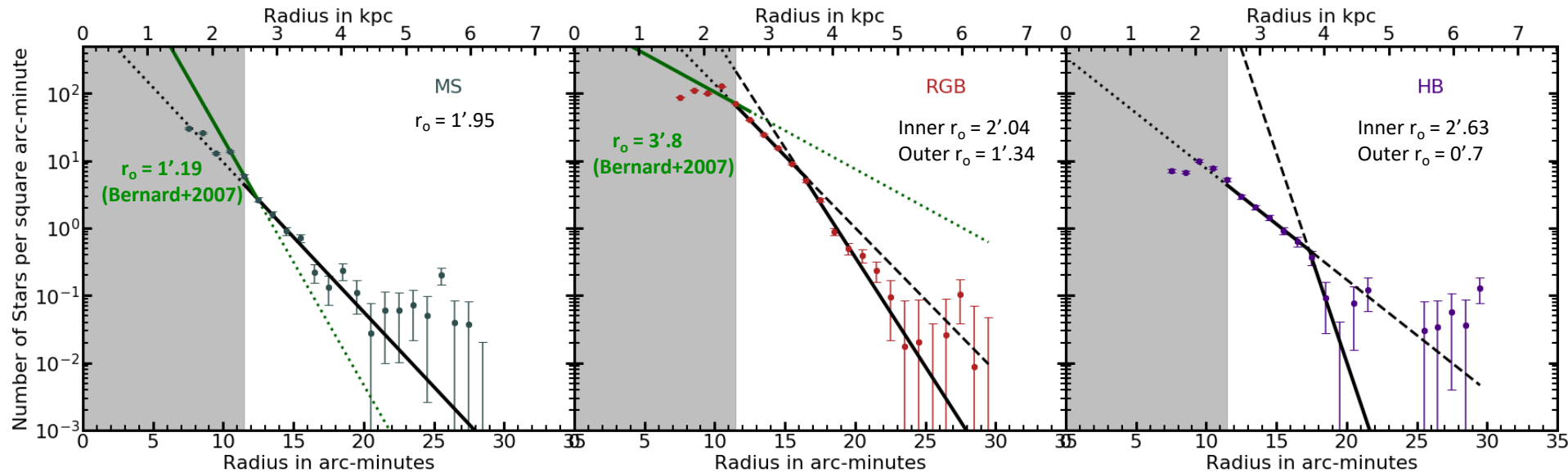
Do Dwarf Galaxies have Stellar Halos?

- A Case Study in IC 1613

IC 1613 dlrr galaxy:
 $M^* \sim 10^8 M_\odot$
 Distance ~ 725 kpc
 $r_h \sim 4.8' \sim 1.01$ kpc

- Observations extend to ~ 8.5 kpc ($\sim 8.3 r_h$) from the center of the galaxy.
- **Widest and Deepest survey** of this dwarf irregular galaxy to date.





Main Results -

- The young population is almost as extended as the old population.
- Breaks in the RGB/HB stars $\sim 16'.5$.
- The outer component of old stars is steeper than the inner components, whereas the young stars profile turns shallow in the outer regions.
- Scale-length depends on the age of the population.

Our Conclusions:

- The broken profile of intermediate-age and old age stars is consistent with those expected for accreted stellar halos.
- Alternately, outside-in shrinking scenario could also explain these profiles.