University of
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DYNAMICAL DISC MASSES OF MANGA GALAXIES

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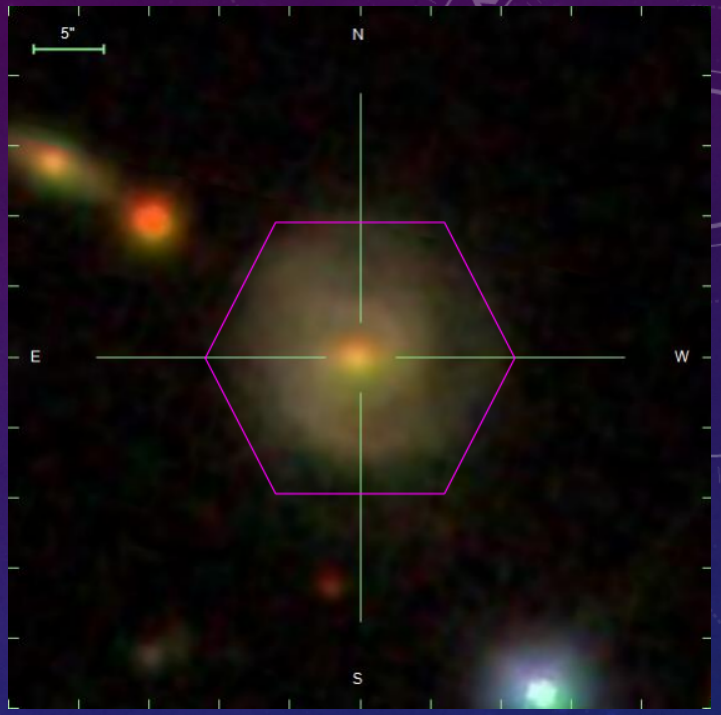
AIM AND THEORY



- MaNGA: SDSS-IV IFU survey
- Wanted:

1. dynamical disc mass
2. lower limits of the dark matter halo mass through rotation curve decompositions

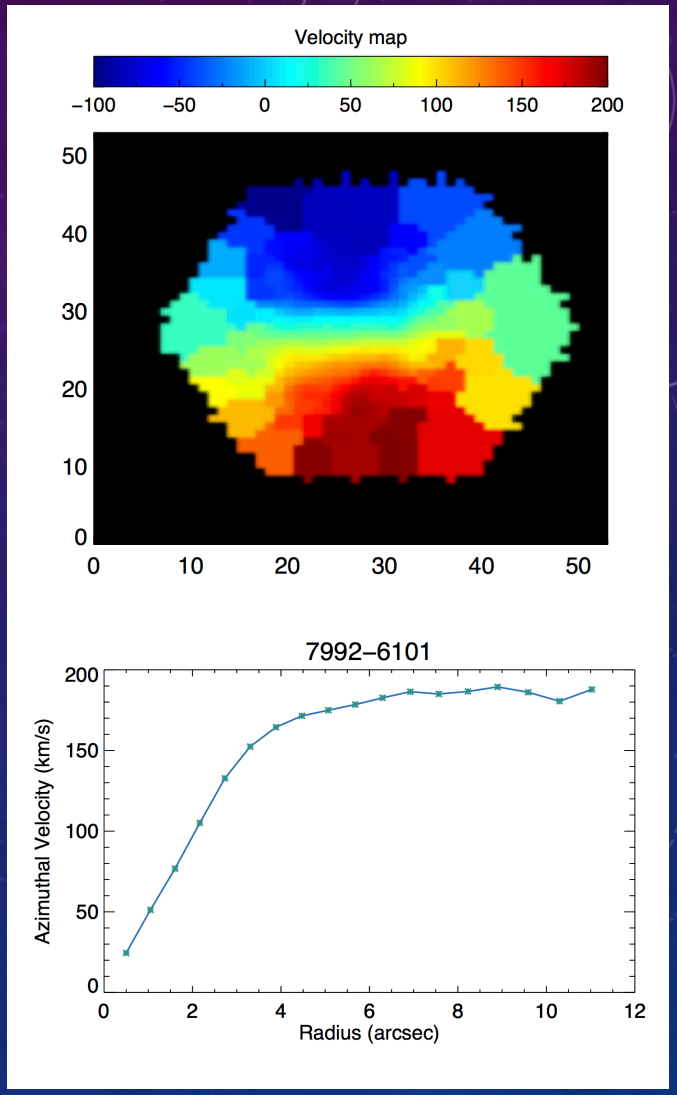
- Dynamical mass density of exponential disk is function of the disk vertical velocity dispersion and disk scale height (Binney & Tremaine 2008)
- see also: DiskMass Survey (Bershady et al. 2010)

SAMPLE SELECTION

- Simard's photometry result (Simard et al. 2011)

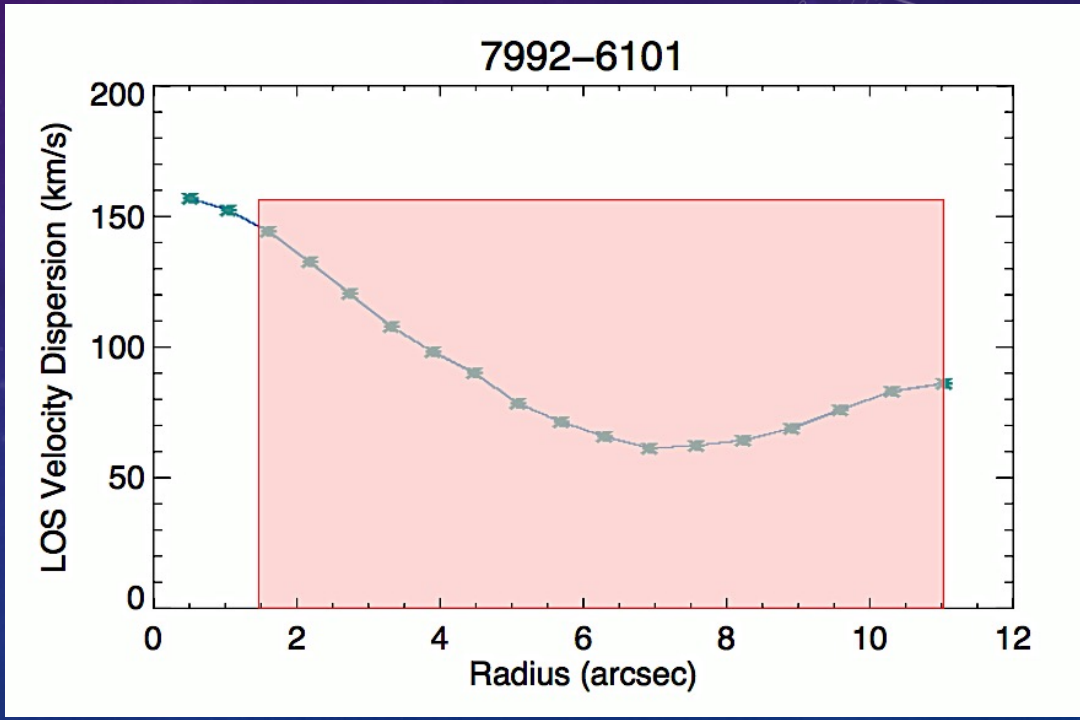
1. Bulge-to-total luminosity ratio: $0 < B/T < 0.5$
2. Inclinations: $5° < i < 45°$

- Alignment between gas and stellar disk
- Eye select
- Maps to curves: Kinemetry (Krajnovic et al. 2006)



FITTING REGION SELECTION

- Inner edge:
  $I\downarrow B\,(r)/I\downarrow T\,(r) = 0.25$
- Outer edge:
  $\sigma\downarrow LOS > 60\ \mathrm{km/s}$
  (Instrumental Velocity Dispersion)
- 34 galaxies



NEXT STEP

- Velocity Dispersion decomposition
- Rotation Curve correction (Weijmans et al. 2008)