

# Gas Kinematics In and Around Edge-on Galaxies from MaNGA Observations

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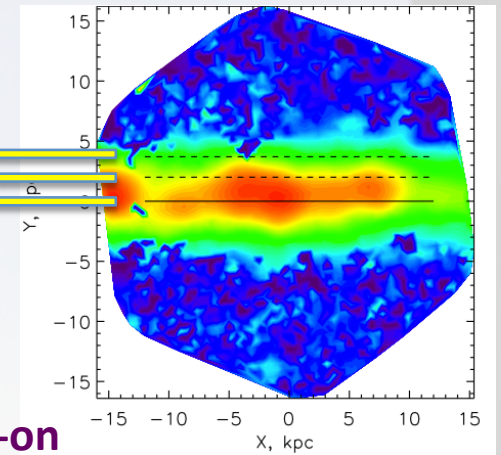
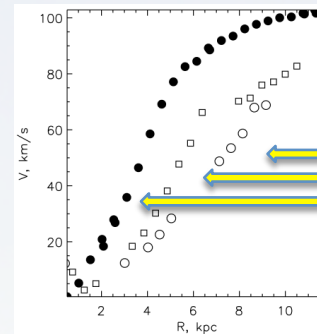
## Edge-On Galaxies in MaNGA sample

Identified 67 edge-on galaxies among ~ 1400 observed

### MaNGA Data Analysis pipelines

(Law et al, 2016, Belfiore et al, 2015) deliver

- Emission line spectrum corrected for underlying absorption
- Output: emission line flux, RV, QA flags.
- Modeling the 2-D rotational field in and around the galaxies involves projection effects, dust extinction and vertical lagging of the emission gas rotation



### Results:

- **28 out of 67 (42%) edge-on galaxies show systematic vertical lagging of the ionized gas rotation.**
- Positive correlation of the lag with galactic mass.
- Developed the 2D rotation field modeling with constraints from the NIR photometry.
- ~500 true edge-on galaxies at the end of MaNGA

