



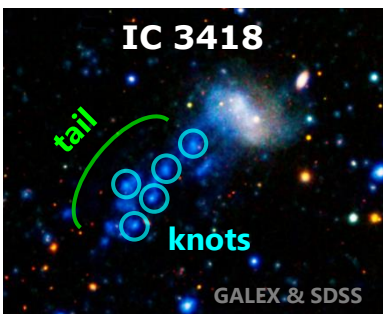
Revealing the Relation between Star Formation Activity of Jellyfish Galaxies and Ram-pressure Stripping

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INTRO

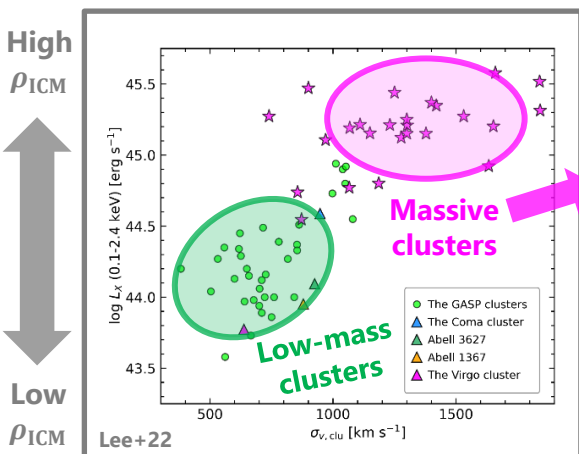
What are "Jellyfish galaxies (JFGs)"?



- ☞ **Disturbed features**
 - One-sided tails
 - Star-forming knots
- ☞ Effect of **ram-pressure stripping (RPS)**
 - Showing **RPS-induced star formation (SF)**!

Host cluster properties of JFGs

- ☞ **Stronger RPS in more massive host clusters!**

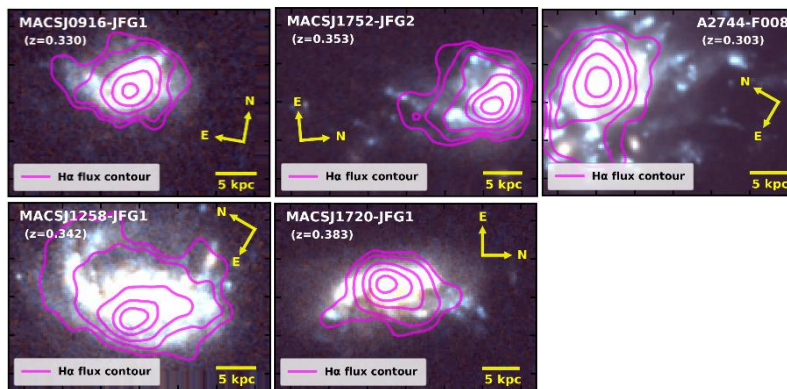


- ☞ **Strong RPS**
 - Dense ICM
 - High velocity
 - Dynamically unrelaxed

DATA & RESULTS

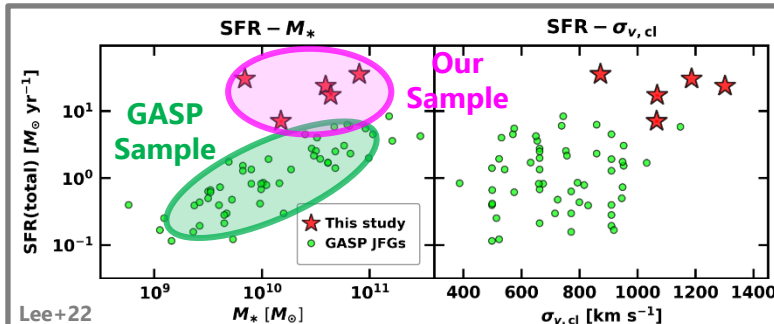
Gemini GMOS/IFU Observations of JFGs

- ☞ **5 JFGs in the MACS clusters and Abell 2744**
- ☞ Emission line analysis: H α flux to SFR



Enhanced SF Activity of the JFGs

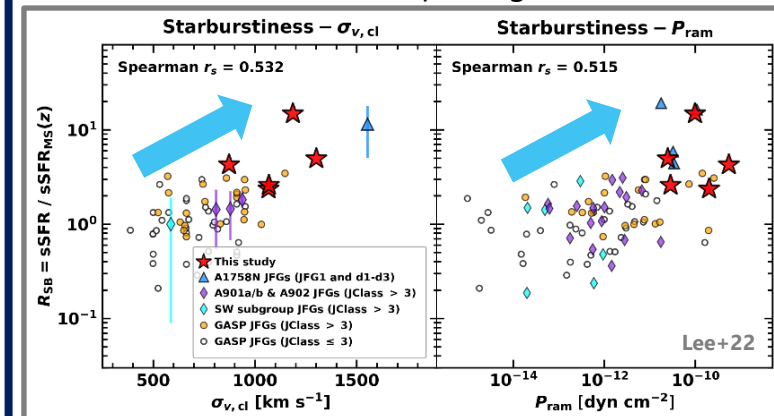
- ☞ Higher SFRs of our sample than the GASP sample



DISCUSSION

SF Activity of JFGs and Host Clusters

- ☞ Starburstiness = SFR excess to the SFMS
- ☞ JFGs with **strong RPS signature** (JClass > 3)
 - GASP JFGs + A901/A902 JFGs (low-mass clusters)
 - A1758N JFGs + Our sample (high-mass clusters)



- ☞ **JFGs in massive clusters:**
 - **Positive correlations: $R_{SB} - \sigma_{v,cl} - P_{ram}$**

- ☞ Rapid increase of pressure due to merger shocks can promote strong SF activity. (Elmegreen & Efremov 1997; Owers+12; Roediger+14)

- ☞ **The short-term effect of RPS on JFGs: Stronger starbursts with stronger RPS!**