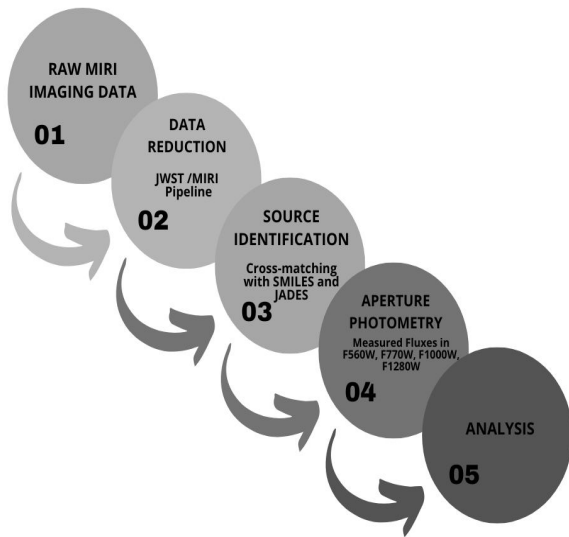

PAH Analysis using MIRI Imaging

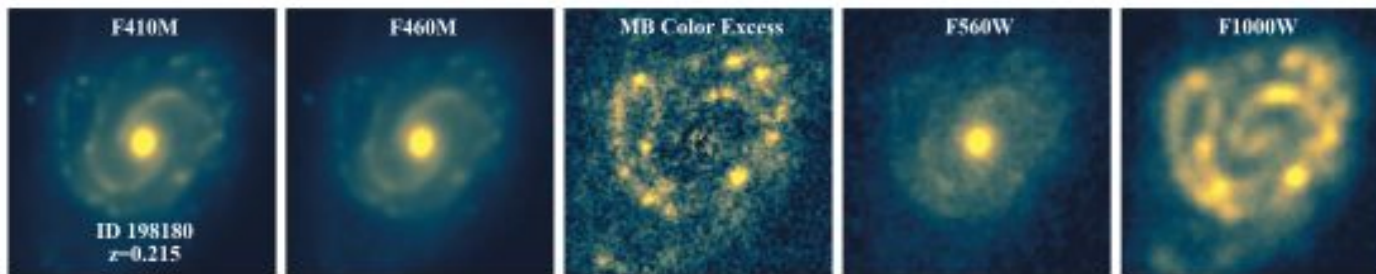
Risha Maher CS
CHRIST (Deemed to be University)

CHRIST COSPAR 2025 : **A Hands-on Workshop with JWST-UVIT**

Background & Objective

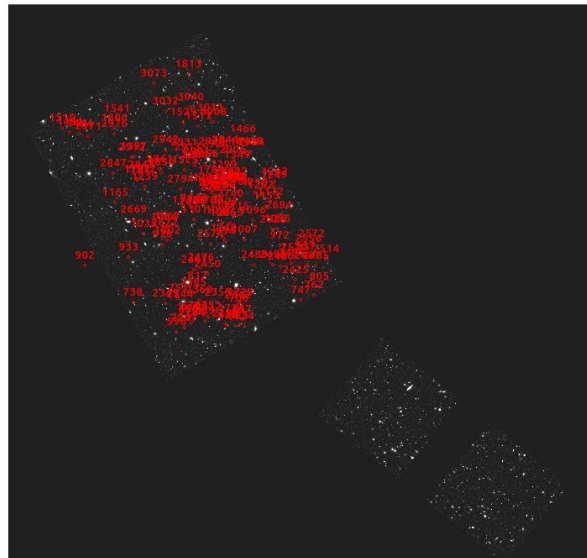
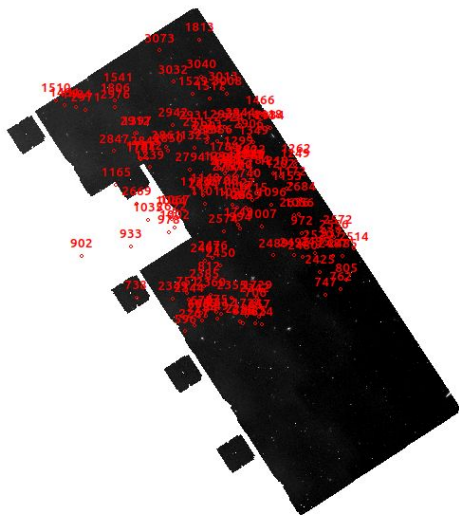


- To identify and quantify PAH emission strength in SMILES galaxies using MIRI imaging data.
- JWST-MIRI provides unprecedented spatial resolution (5–28 μm) to study PAH emission.



Credits : Alberts et al., 2024

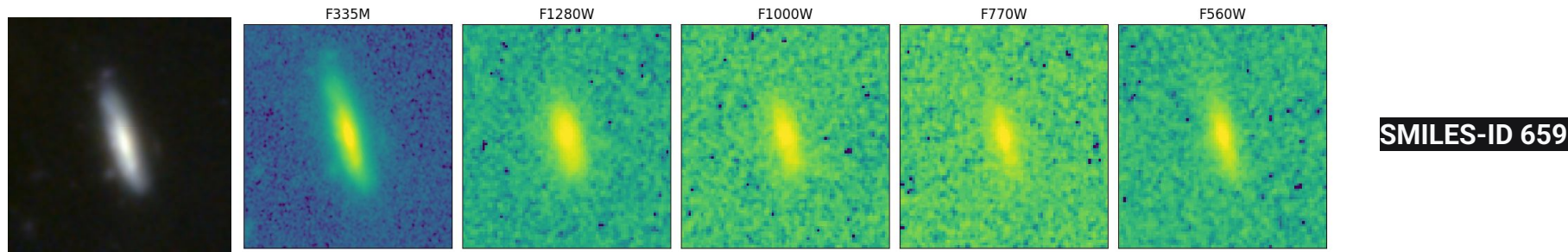
SMILES v/s JADES



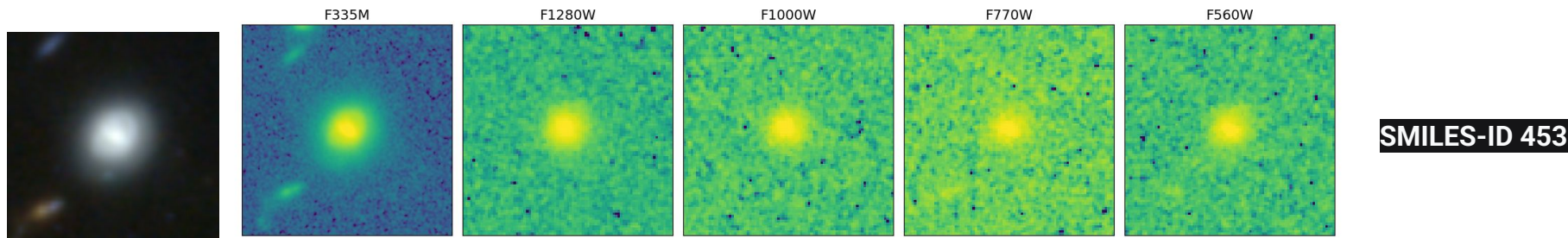
SMILES has ~650 galaxies at $z < 1$ observed with MIRI.

Of these, roughly 300–350 galaxies have overlapping NIRCam/NIRSpec data from JADES.

RESULTS



Both galaxies show $F_{7.7}/F_{3.3} \approx 1$, indicating balanced PAH emission, a mix of neutral and ionized PAHs typical of normal star-forming galaxies.



Thank
you!

