Resolved spectroscopy of cluster galaxies at \( z \sim 1.4 \)

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Cluster environment

- Internal processes
- Environmental interactions

Peng et al., 2010
XMMXCS J2215.9-1738 z ~1.46 - $M_{200} \sim 2.1 \times 10^{14} M_\odot$

XMMU J2235.3-2557 z ~1.39 - $M_{200} \sim 7.7 \times 10^{14} M_\odot$
‘The kinematics of cluster galaxies at \( z \sim 1.4 \)’
Amos et al., in prep

Comparison to field galaxies:
- KROSS
- KGES
- Stellar mass to total mass
- Velocity dispersion vs SFR
- Gas fraction
Near Infrared Spectrograph - NIRSpec
NASA/ESA

Spectral resolution $R \sim 100 - 2700$
Range of spaxel scales: $0.1'' \times 0.1''$
FOV - $3'' \times 3''$ (IFU mode)

High Angular Resolution Monolithic Optical and Near-infrared Integral field spectrograph - HARMONI
ESO

Spectral resolution $R \sim 3000 - 20000$
Range of spaxel scales: $0.03'' \times 0.06''$ to $0.004''$
FOV - $6'' \times 9''$
Questions?