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■ Title

Charting galaxy formation within the cosmic web

■ Summary

Models and simulations suggest that galaxies are shaped by the cosmic web filaments, the dominant reservoir of baryons, obtaining fuels to from stars and acquire morphologies. However, observational evidence is still highly limited and this fundamental paradigm has not yet been verified. To improve our understanding in this regard, we will target the SSA22 proto-cluster at z=3, where the cosmic web gas filaments have been discovered at the core. On the basis of multi-band ALMA observations at a range of spatial resolutions, we will intend to understand baryon cycle around starbursts embedded in the gas filaments and the formation and evolution of the internal structure of the galaxies.