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Presentation Requested: oral
Category: Assembly of Galaxies / Mass & Structure Evolution
Question: Other

Kinematic Assembly of Galaxy Disks Over $0 < z < 1$

We will show that over the last ~ 8 billion years since a redshift of one, the population of star-forming galaxies of Milky Way mass has settled kinematically into flat, rotationally-supported, disk galaxies. In the past, these galaxies had more disordered motions (as measured via an integrated gas velocity dispersion, σ_g), less ordered rotation (V_{rot}), and shallower potential well depths than they do today. Over $0.1 < z < 1.2$, the median σ_g of star-forming galaxies of Milky Way mass has progressively decreased while V_{rot} has increased. Our dataset consists of gas phase kinematics measured from emission lines in deep Keck spectra for a sample of 544 representative star-forming galaxies.