

The Quenched Mass Portion of Star-forming Galaxies and the Origin of the Star Formation Sequence Slope

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Observationally, a massive disk galaxy can harbor a bulge component that is comparably inactive as a quiescent galaxy. It has been speculated that the quenched component contained in star-forming galaxies (SFGs) is the reason why the star formation main sequence (MS) has a shallow slope at high masses. In this talk, we present a model to quantify the quenched mass portion of SFGs at fixed stellar mass (M_*) and to reconcile the MS slopes in both the low- and the high-mass regimes.