

Environmental dependence of the IMF-sensitive features in intermediate-mass quiescent galaxies.

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Abstract

In this work, we investigate the impact of large-scale environment on the IMF in quiescent galaxies. For this purpose, we compare the trend of IMF-sensitive spectral features with respect to galaxy mass in three samples of intermediate-mass galaxies that reside in low, intermediate and high-density environments. Using SDSS DR7 spectra stacked by velocity dispersion and redshift, in a purely observational approach, we find that the IMF of intermediate-mass galaxies does not significantly depend on the galactic environment. (See poster).