Evolution of Spheroidal Galaxies at z < 1 from the Deep Extragalactic Evolutionary Probe (DEEP)

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"DEEP" is a multi-year survey of faint galaxies using the Keck 10m telescope and the Hubble Space Telescope. So far, our data consist of spectra of about 1000 galaxies with the HST morphology. With a subset of these data, we have studied evolution of spheroidal galaxies at z < 1, most of them very likely being E/S_0 's. Here, we show main results of this study, which favor passive luminosity evolution and no or little number density evolution for E/S_0 's at z < 1. This result is not compatible with some theoretical models based on the CDM dominated universe, where it is predicted that 50-70% of present-day E/S_0 s are formed at z < 1.