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Presentation Requested: poster

Category: Assembly of Galaxies / Mass & Structure Evolution

Question: Other

The Ultraviolet Hubble Ultra Deep Field: Diversity in Clumpy Galaxies

I will present an overview of the last campaign done with the Hubble Space Telescope in the Ultra Deep Field (HUDF) using the Ultraviolet cameraWFC3-UVIS. The Ultraviolet coverage provides the missing link in star formation at intermediate redshifts ($0.5 < z < 1.5$). Using ultraviolet light, we have combined the full range of colors, stretching all the way from ultraviolet to near-infrared light. The resulting image - made from 841 orbits - contains approximately 10,000 galaxies, extending back in time to within a few hundred million years of the Big Bang. Here we present the analysis of the F275W band comprised of a few hundred galaxies with a variety of clumps - from single clumps to galaxies littered with clumps. We perform a morphological study of ultraviolet-detected sources at intermediate redshifts in the optical rest-frame and find that most galaxies are disks, followed by irregulars. We find that the majority of these UV bright clumpy galaxies have spectral types of Scd's and starbursts and have clump sizes between 0.7 to 1.9 kpc. We suggest that most of these clumps are giant star-forming regions or the building blocks of today's disks.