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Title: "Role of Massive Stars in the Evolution of Primitive Galaxies"

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Abstract:

An important factor controlling galaxy evolution is feedback from massive stars. It is believed that the nature and intensity of stellar feedback changes as a function of galaxy mass and metallicity. At low mass and metallicity, feedback from massive stars is mainly in the form of photoionizing radiation. At higher mass and metallicity, it is in stellar winds. I Zw 18 is a local blue, compact dwarf galaxy that meets the requirements for a primitive galaxy: low halo mass $<10^9 M_{\text{sun}}$, strong photoionizing radiation, no galactic outflow, and very low metallicity, $\log(\text{O}/\text{H})+12=7.2$. We will describe the properties of massive stars and their role in the evolution of I Zw 18, based on analysis of ultraviolet images and spectra obtained with HST.