Conference: Star Formation Across Space and Time
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Title: "I Zw 18, a Template for Star-Forming, z>7 Galaxies"

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Abstract:

I Zw 18-NW, one of the most primitive nearby dwarf galaxies, is arguably the best template we have for star-forming, very high-redshift galaxies (z>7). We have therefore obtained a far-UV spectrum of I Zw 18-NW using Hubble's Cosmic Origins Spectrograph (COS). The spectrum indicates star-formation over the past ~10 Myr, a very low stellar metallicity, log Z/Zsun ~ -1.7, and high average stellar rotation rate, Vsin*i*~200 km/s. Stellar wind lines are very weak, and the edge velocity of wind lines is very low (~250 km/s). The overall properties of I Zw 18-NW are consistent with theories of very low metallicity, rapidly rotating stars, e.g. Meynet et al. (2006).