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Hot, Massive Stars in I Zw 18

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*Abstract:* I Zw 18 is one of the most primitive blue, compact dwarf galaxies. The ionized gas in I Zw 18 has a low oxygen abundance ( $O \sim 1/30 O_{\text{sun}}$ ) and nitrogen abundance ( $N \sim 1/100 N_{\text{sun}}$ ) (Pequignot 2008). We have obtained a far-UV spectrum of the northwest massive star cluster of I Zw 18 using Hubble's Cosmic Origins Spectrograph (COS). The spectrum is compatible with continuous star-formation over the past  $\sim 10$  Myr, and a very low metallicity,  $\log Z/Z_{\text{sun}} \sim -1.7$ , although the stellar surface may be enhanced in carbon. Stellar wind lines are very weak, and the edge velocity of wind lines is very low ( $\sim 250$  km/s).

Category (Complete): 06. Stellar Evolution, Stellar Populations

Presentation Preference (Complete): &nbsp;Poster

Additional Info (Complete):

Status: Complete

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