Hot, Massive Stars in I Zw 18

Author Block: Sara R. Heap\textsuperscript{1}, D. Lindler\textsuperscript{2}, E. Malumuth\textsuperscript{3}
\textsuperscript{1}NASA's GSFC, \textsuperscript{2}Sigma Space Corp., \textsuperscript{3}Wyle Information Systems.

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\textsubscript{1}/30 Osun) and nitrogen abundance (N\textsubscript{1}/100 Nsun) (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 \(\sim10\) Myr, and a very low metallicity, \(\log Z/Z_{\odot} \sim -1.7\), 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 (\(\sim250\) km/s).

Category (Complete): 06. Stellar Evolution, Stellar Populations
Presentation Preference (Complete): &nbsp;Poster
Additional Info (Complete):
Status: Complete