

# Physics & Astronomy Colloquium

Presents

## Jessica Werk

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Thursday, August 29, 2019  
4:10 pm, Webster Room 17

### “A Colossal Galaxy Adventure”

The circumgalactic medium (CGM; non-ISM gas within a galaxy virial radius) regulates the gas flows that shape the assembly and evolution of galaxies. Owing to the vastly improved capabilities in space-based UV spectroscopy with the installation of HST/COS, observations and simulations of the CGM have emerged as the new frontier of galaxy evolution studies. In the last decade, we have learned that the CGM of Milky Way mass galaxies likely contains enough material to harbor most of the metals lost in galaxy winds and to sustain star-formation for billions of years. Remarkably, this implies that most of the heavy elements on earth cycled back and forth multiple times through the Milky Way’s own CGM before the formation of the solar system. In the spirit of MS-DOS adventure games, I have designed a fully interactive colloquium that operates on a complex network of powerpoint hyperlinks. In this adventure, you will choose any of 36 possible tracks on which to explore observational and simulated signatures of cosmic gas flows.

*Please meet our guest speaker and share in refreshments 3:45-4:10 p.m. in the foyer on floor G above the lecture hall*

Host: Dr. Guy Worthey



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