

University of Wisconsin-Milwaukee

Dept. of Physics
COLLOQUIUM

*The Baryon Cycle in the Smallest
of Star-Forming Galaxies*

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3:30 PM

Lapham Hall – Room 160

Our view of galaxy evolution has expanded to include not just the evolution of individual galaxy components (gas, stars, chemical elements), but the cyclical interplay of a galaxy with its surroundings. Frequently termed the 'baryon cycle', the galaxy evolution framework now includes: how gas is accreted onto galaxies, turned in stars, ejected out of galaxies via energetic feedback processes, and potentially re-accreted. The impact of the baryon cycle is amplified in the shallow potential wells of the smallest of star-forming galaxies. This is born out in cosmological simulations of the universe where low mass galaxies act as boundary conditions to structure formation and provide stringent tests of baryon and dark matter physics.

In this talk, I will present observational results on the baryon cycle in low mass galaxies and discuss where we find (dis)agreement between real galaxies and predictions from state-of-art cosmological simulations.

