Timothy Paglione
York College of CUNY, American Museum of Natural History

*Star Formation from the Radio to Gamma-Rays*

Massive stars are an important driver of much of galaxy evolution. These stars live furiously, greatly affecting their surroundings with their winds and radiation, then die dramatically in giant explosions that enrich the interstellar medium in heavy elements. Their lives are relatively brief as well ("only" 10 million years or less) so their impact is not only profound but immediate. Certain galaxies known as starbursts create numerous clusters of these massive stars in their centers. Starburst galaxies may be studied across all the electromagnetic bands, probing different physical regions and processes, but they are traditionally identified by their radio and infrared emission or optical spectroscopy. I augment these studies by including data from a window only recently opened to us: gamma-rays. The gamma-ray emission effectively ties together nearly the entire spectrum of a galaxy while elucidating the impact of cosmic rays on galaxy evolution.