

# Seminar

Friday, 6<sup>th</sup> August 2010

11 am - Room 701

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## ***Exploring the Astrophysics of Intense Star Formation in Starburst Galaxies***

Nearby starburst galaxies provide opportunities to explore the astrophysics of intense modes of star formation operating on galactic scales. Multiwavelength observations of such systems demonstrate that as star formation moves from being isolated events, as are typical of the disks of spiral galaxies, to closely spaced and thus strongly interacting regions, energy densities in the interstellar gas rise dramatically. Conditions in the nearest two major starburst galaxies, M82 and NGC253, illustrate the basic issues associated with these circumstances, including high thermal pressures conducive to formation of dense star clusters, extensive high temperature gas feeding substantial galactic winds, and extreme fluxes of cosmic rays. In this talk I will review how we are beginning to measure conditions in starbursts and briefly discuss their astrophysical implications for feedback processes in galaxies, as well as for the future of multi-messenger observations, such as those now getting under way with [IceCube](#).

*All Welcome*

### Contact Details

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