

Conference: High Energy Astrophysics Division (HEAD) meeting

Location: Newport, RI **Dates:** Sept. 7-10, 2011

Title: "Calibration of Star Formation Rates Across the Electromagnetic Spectrum"

Presenter: Hornschemeier, Ann

Abstract:

Measuring and mapping star-forming activity in galaxies is a key element for our understanding of their broad- band spectra, and their structure and evolution in our local, as well as the high-redshift Universe. The main tool we use for these measurements is the observed luminosity in various spectral lines and/or continuum bands. However, the available star-formation rate (SFR) indicators are often discrepant and subject to physical biases and calibration uncertainties. We are organizing a special session at the 2012 IAU General Assembly in Beijing, China (August 20-31, 2012) in order to bring together theoreticians and observers working in different contexts of star-formation to discuss the status of current SFR indicators, to identify open issues and to define a strategic framework for their resolution. The is an ideal time to synthesize information from the current golden era of space astrophysics and still have influence on the upcoming missions that will broaden our view of star-formation. We will be including high-energy constraints on SFR in the program and encourage participation from the high energy astrophysics community. This poster also includes a full list of Beijing IAU sessions so you can plan your trip!