NRAO/Socorro Colloquium Series

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Galactic Winds: An Empirical Perspective on Their Role during the Assembly of Local Galaxies

Abstract:

Feedback from star formation is central to cosmological models of galaxy formation and evolution. Tuning the feedback prescription so that simulations reproduce the observed properties of the galaxy population has provided much insight into which galaxies might lose significant amounts of metals and gas via galactic winds. The challenge comes in testing these descriptions against empirical measurements. The talk will first take a detailed look at galactic gas flows in a few of the most extreme starbursts in the local universe where broad emision-line wings reveal clumps of gas condensing out of a fast, hot wind. The outflows become invisible in emission at large radii but can be studied in absorption against a background light source. I will show that even the halos of typical galaxies have been affected by these winds and present direct observations of the outflowing gas over the period when present day galaxies were assembled (redshift z < 2).

September 25, 2015

11:00 am

Array Operations Center Auditorium

All NRAO employees are invited to attend via video, available in Charlottesville Auditorium, Green Bank Auditorium, and VLA Video Conference Room.

Local Host: Sarah Burke Spolaor