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## Multi-Wavelength Correlations and AGN as Possible Particle Accelerators

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Robust connections exist between various energy regions in the spectra of nearby galaxies. The flux ratios from widely separated spectral regions are often remarkably constant while originating via very different processes with varying efficiencies. Although the radio-far infrared (FIR) correlation is best known, consistent flux ratio relationships also are found between gamma-rays and the FIR, as well as between gamma-ray and radio fluxes. These relationships are understood in cases where the underlying linkage involves related power sources, such as massive stars. However, some systems containing substantial AGNs as well as starbursts still fall close to the standard flux ratio correlations. In this talk, I will explore some of the astronomical issues playing into the interpretation of these correlations and also briefly touch on the range of cosmic power sources that may produce these patterns.

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