

Physics Colloquium

“Relativistic Jets in Active Galaxies”

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Relativistic outflows in the form of “jets” are often observed in active galaxies. These are thought to originate near supermassive black holes in the centers of these objects, and can transport energy out to the megaparsec scale. A review of some basic physics of jet models will be given, and their role in “unified models” of active galaxies will be discussed. The radio astronomy group at Trinity University is engaged in a long-term study of a complete sample of one particular active galaxy type known as “lobe-dominated quasars”. The statistics of quasar jet properties such as brightness, apparent velocity, and magnetic field configuration are being used to test predictions of jet models. One surprising result suggests intrinsic jet acceleration on scales of tens of parsecs.

Thursday, Feb 2, 3:40pm in Sci 234

Refreshments at 3:00 in Science 103