

Abstract Submitted  
for the DPP07 Meeting of  
The American Physical Society

**Studying the Physics of AGN Jets Near Their Origin<sup>1</sup>** DANIEL HOMAN, Denison University — I will discuss the use of Very Long Baseline Array (VLBA) observations to probe the Physics of jets from Active Galactic Nuclei (AGN) on parsec scales, near their origin from the accretion disk/super massive black hole system. These high resolution observations can study not only the kinematics, acceleration, and collimation of these relativistic jets, but also their spectral and polarization properties. Polarization, whether intrinsic to the emitted synchrotron radiation or the result of birefringence effects within the jet, serves as a probe of the particle population and the 3-D magnetic field structure of jets, and I will discuss results from recent and ongoing work to constrain these properties.

<sup>1</sup>This work has been supported by Research Corporation and NSF Grant AST-0707693

Daniel Homan  
Denison University

Date submitted: 18 Jul 2007

Electronic form version 1.4