Abstract Submitted for the APR09 Meeting of The American Physical Society

Supermassive Black Holes and Spiral Structure in Disk Galaxies¹ DANIEL KENNEFICK, University of Arkansas, Fayetteville, MARC SEIGAR, University of Arkansas, Little Rock, JULIA KENNEFICK, CLAUD LACY, University of Arkansas, Fayetteville, ARKANSAS GALAXY EVOLUTION SURVEY (AGES) COLLABORATION — Our collaboration has recently identified an interesting relation between supermassive black hole (SMBH) mass and the pitch angle of spiral arms in disk galaxies whose SMBH mass has been measured with some precision. I discuss this relation and the uses to which it might be put in permitting estimates of SMBH mass for distant normal galaxies for which only imaging data is available, as well as its possible significance for our understanding of galactic structure.

¹NASA EPSCOR

Daniel Kennefick University of Arkansas, Fayetteville

Date submitted: 09 Jan 2009

Electronic form version 1.4