THE DETECTION OF A LARGE, POWERFUL FR I RADIO GALAXY IN A SPIRAL HOST

MICHAEL J. LEDLOW

University of New Mexico, Institute for Astrophysics Dept of Physics & Astronomy, Albuquerque, NM USA

FRAZER N. OWEN

National Radio Astronomy Observatory Socorro, NM USA

AND

WILLIAM C. KEEL
University of Alabama, Dept of Physics & Astronomy
Tuscaloosa, AL USA

We report the detection of a FR I-like radio galaxy with a total extent of more than 200 kpc in a disk-dominated host. Traditional wisdom maintains that these types of radio sources are only found in elliptical hosts. We confirm the optical classification of this galaxy from deep, multicolor optical/NIR imaging and the detection of a spiral arm, an optical rotation curve, and line-ratios in the disk consistent with HII regions and star formation. At 20cm, we find a 36kpc knotty, jet extending into the southern lobe. At 3.6cm we detect a kpc-scale jet with the same position angle. With the exception of the radio source, this galaxy appears to be a fairly ordinary, dusty, star-forming spiral, with some evidence for a weak, obscured, AGN.

