

ABSTRACT

Cepheids in the Fornax Cluster Galaxy NGC 1365
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We report the detection of Cepheid variable stars in the barred spiral galaxy NGC 1365, using the Hubble Space Telescope Wide Field and Planetary Camera 2 (WFPC2). Twelve V (F555W) and four I (F814W) epochs of cosmic ray split observations were obtained in August and September 1995. Eighty Cepheids have been discovered, with periods from 10 to ~ 60 days. Light curves of the Cepheids will be presented, and their corresponding period-luminosity diagrams will be discussed. Implications for the Hubble Constant will also be discussed.