

# Global Properties of HI in Galaxies: a Workshop in Honor of the 35th Anniversary of the Tully-Fisher Relationship

ASTRONOMY  
AND  
ASTROPHYSICS

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## A New Method of Determining Distances to Galaxies

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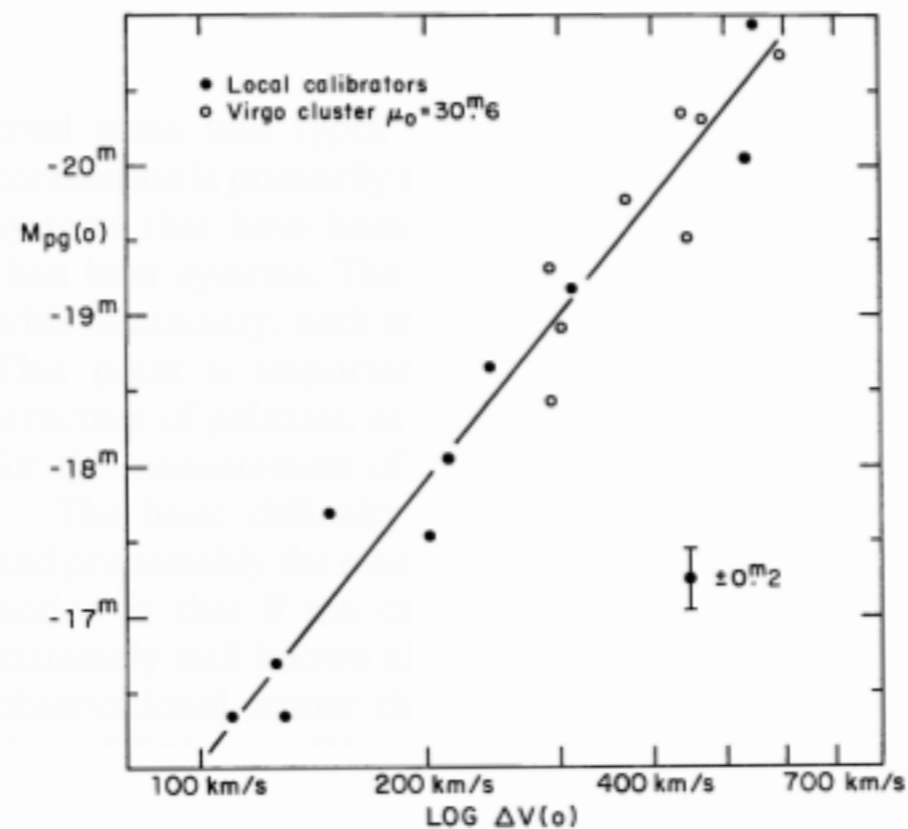
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**Summary.** A good correlation between a distance-independent observable, global galaxian HI profile widths, and absolute magnitudes or diameters of galaxies offers a new extragalactic distance tool, as well as potentially being fundamental to an understanding of galactic structure. The relationships are calibrated with members of the Local Group, the M81 group, and the M101 group and have been used to derive distances to the Virgo cluster ( $\mu_0 = 30^m.6 \pm 0^m.2$ ) and the Ursa Major cluster ( $\mu_0 = 30^m.5 \pm 0^m.35$ ). A preliminary estimate of the Hubble constant is  $H_0 = 80$  km/s/Mpc.

**Key words:** galaxies — distances — neutral hydrogen



## Green Bank Workshops

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1985: Science with a Millimeter Array

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