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A Comparison of the THINGS HI and HERACLES CO Velocity Dispersion in Nearby Galaxies

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In this project data from The HI Nearby Galaxy Survey (THINGS) and from the HERA CO Extragalactic Line Survey (HERACLES) is being used to compare the HI (neutral hydrogen) and CO dispersions in nearby galaxies in order to see if they are related. This is important in improving star formation laws (as they currently only use HI dispersions, but stars form from molecular gas) and to better understand turbulence in galaxies. Preliminary analysis indicates that the HI has higher velocity dispersions than the CO.

**Level (Hons, MSc,
 PhD, other)?**

MSc

**Consider for a student
 award (Yes / No)?**

Yes

**Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?**

No

Primary author: Mr MOGOTSI, Keoikantse Moses (UCT)

Presenter: Mr MOGOTSI, Keoikantse Moses (UCT)

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