Extragalactic Hydrogen

Available profiles for PGC 2

Screenshot from first of 21,490 entries in the All Digital HI catalog in the Extragalactic Distance Database (https://edd.ifa.Hawaii.edu)

PGC Number: 2
Galaxy Name: PGC2

Cosmicflows: Helene Courtois et al.
Cornell group: Martha Haynes, Riccardo Giovanelli ....
HI observations with single dish radio telescopes

Sources smaller than beam:
Exposure times to reach specified Signal/Noise:

\[ t \sim D^4 \]
HI observations with single dish radiotelescopes

GBT: $\delta > -45$

Parkes: $\delta < -45$

Arecibo: $0 < \delta < 38$

FAST: $-14 < \delta < 65$ (-1 < $\delta$ < 52)

Sources smaller than beam:
Exposure times to reach specified Signal/Noise:

$t \sim D^4$
Current sky coverage
H₀ = 73.4 ± 2.4 km/s/Mpc
Ehsan Kourkchi et al. 2021

\[ M_b = 1.33 M_{HI} + \gamma \lambda L_\lambda \]

Baryonic mass = gas mass + stellar mass
Galaxy flows

\[ V_{pec} = V_{obs} - H_0 \, d \]
Large scale structure

Laniakea: Brent Tully et al. 2014

Dipole repeller: Yehuda Hoffman et al. 2018

Local Void: Brent Tully et al. 2019

South Pole Wall: Daniel Pomarede et al. 2020
Large scale structure