

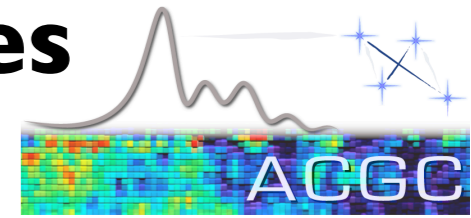


Kinematics of CO in THINGS Galaxies

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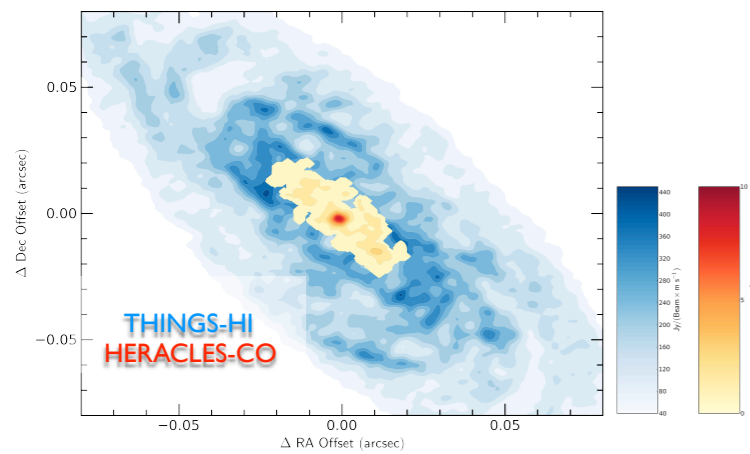
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HI and CO Surveys

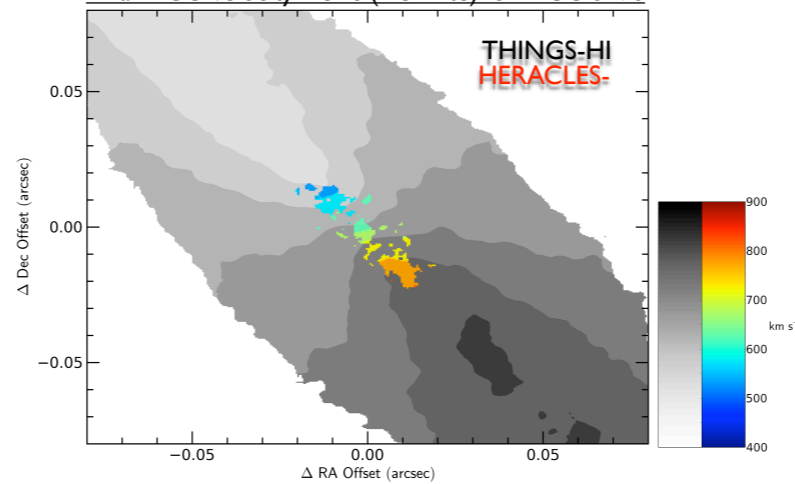
HI and CO Intensity Maps for NGC 3198



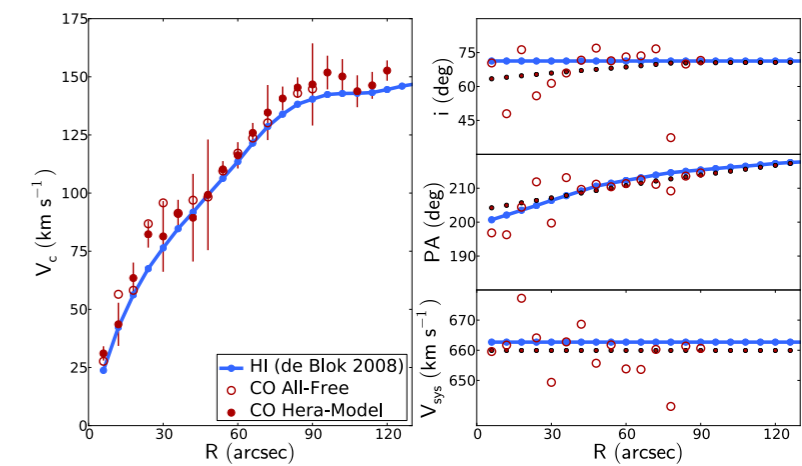
- **THINGS:** THE HI Nearby Galaxy Survey
Walter et al. 2008
- **HERACLES:** The HERA CO Line Emission Survey
Leroy et al. 2009
- Most sensitive HI and CO surveys respectively
- Similar observational parameters
THINGS: $\sim 10''$ and $\sim 5 \text{ km s}^{-1}$
HERACLES: $12''$ and $\sim 2.6 \text{ km}^{-1}$

HI and CO Kinematics

HI and CO Velocity Fields (Hermite) for NGC 3198



Rotation Curves for NGC 3198



- High-Resolution Rotation Curves and Galaxy Mass Models from THINGS (de Blok et al. 2008)
- Most comprehensive derivation of dynamics of 19 THINGS galaxies
- This work: **Comparison of CO and HI kinematics in nearby galaxies**

My Poster

Results for NGC 3198 and NGC 7331
Intensity Maps
PV-Diagrams, Velocity Fields
Rotation Curves