

The Chemical Evolution of the ISM in nearby Galaxies

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Schuster et al. 2007, A&A, 461, 143

Use **HIFI/Herschel** to study the line profiles of the most important cooling lines in the ISM of nearby galaxies.

Interlinked key questions:

- **Gas cooling:** [CII], [OI], [C], CO, H₂O, ...
- **Gas heating**
- **ISM components:** the origin of [CII] ?
- Galaxy components:
 - **Outer disks**
 - **Spiral arms**
 - Formation and destruction of GMCs ?
 - Regulation of star formation ?

Contact us at poster # 42 !

