

Investigating physical properties of molecular gas in the disk of NGC 253

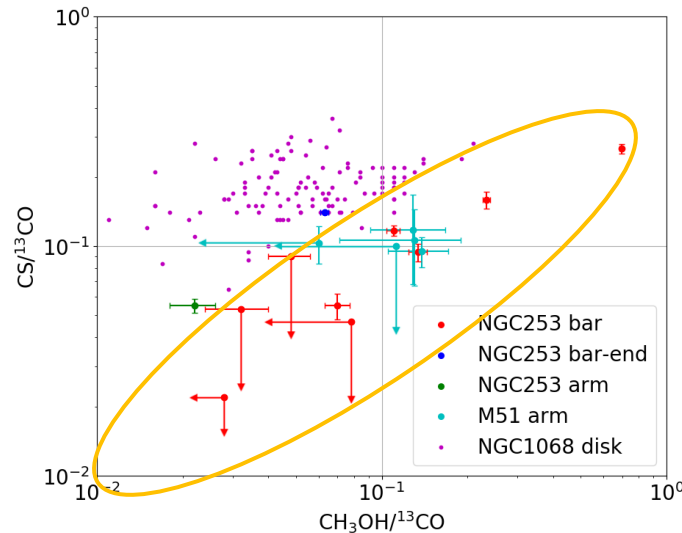
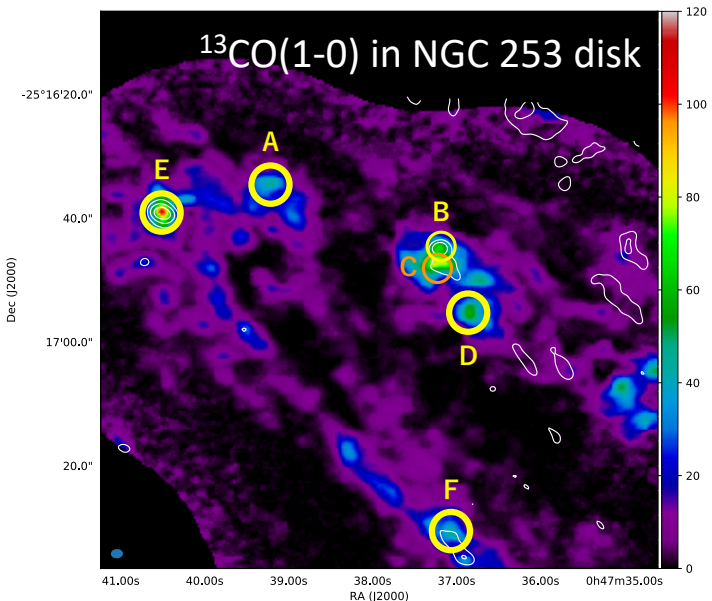
Ryotaro Konishi, Kazuyuki Muraoka, Toshikazu Onishi (Osaka Prefecture University),
Kazuki Tokuda (NAOJ/Osaka Prefecture University)

Goal

To determine physical properties of molecular gas of NGC253 disk.

Method

To observe NGC253 disk with ALMA and examine $\text{CH}_3\text{OH}/^{13}\text{CO}$, $\text{CS}/^{13}\text{CO}$ and 3 mm/ ^{13}CO intensity ratios in individual regions (e.g., bar and arm) of the disk.



Quote

M51 : Watanabe et al. (2016)
NGC 1068 : Tosaki et al. (2017)

✓ Molecular gas in NGC253 bar is cold and dense?