

Table 1. Some Promising Zeeman Transitions for ALMA

| Molecule | Tran. | Freq. (GHz) | Z (Hz μG^{-1}) | ALMA Band | % band center |
|--------------|-------|-------------|----------------------------|-----------|---------------|
| CN | 1-0 | 113.448 | 2.2 | 3 | 12 |
| | 2-1 | 226.332 | 2.6 | 6 | 7 |
| | 2-1 | 226.874 | 1.2 | 6 | 7 |
| SO | 2-1 | 99.299 | 1.0 | 3 | 2 |
| | 4-3 | 158.971 | 1.0 | 4 | 10 |
| | 2-1 | 236.452 | 1.7 | 6 | 3 |
| CCS | 3-2 | 33.751 | 0.7 | 1 | 12 |
| | 4-3 | 45.379 | 0.6 | 1 | 18 |
| SiO (masers) | 1-0 | 43 | 8.2×10^{-4} | 1 | 13 |
| | 2-1 | 86 | ?? | 3 or 2 | 15 or 9 |

Priority 1:

Band 3 (86 - 116 GHz)

Band 6 (211 - 275 GHz)

Priority 2:

Band 1 (31 - 45 GHz)

Band 2 (67 - 90 GHz)

Band 4 (125 - 163 GHz)

For reference:

H I $Z=2.8 \text{ Hz } \mu\text{G}^{-1}$

OH(1665) $Z=1.96 \text{ Hz } \mu\text{G}^{-1}$