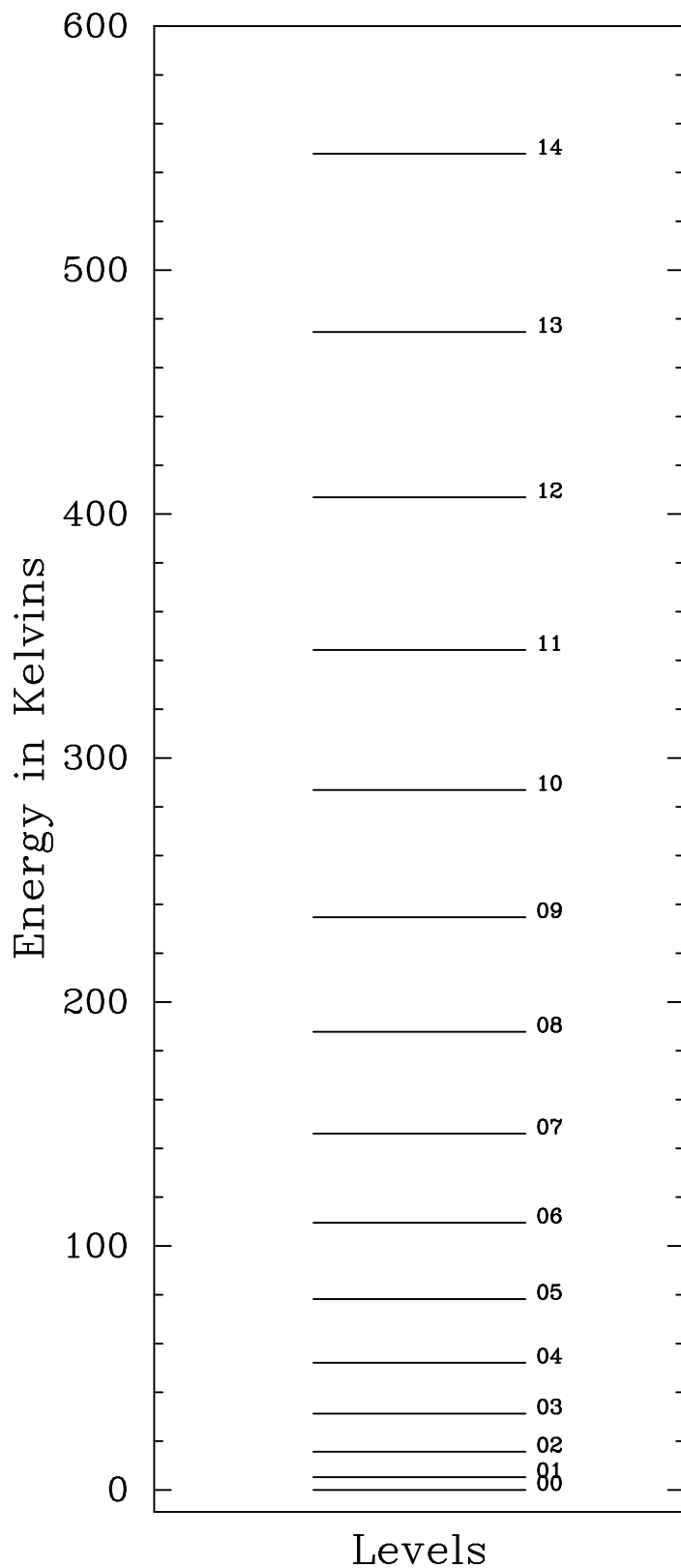


# $^{13}\text{CN}$

B(rot): 54.34314 GHz    De = 1.8000E-06 GHz    Dipole Mom = 1.450 Debye



| Quantum Numbers |   |    | Level Degeneracy | Energy Above Ground (Kelvins) |
|-----------------|---|----|------------------|-------------------------------|
| J               | K | K1 |                  |                               |
| 00              |   |    | 1.               | 0.00                          |
| 01              |   |    | 3.               | 5.22                          |
| 02              |   |    | 5.               | 15.65                         |
| 03              |   |    | 7.               | 31.30                         |
| 04              |   |    | 9.               | 52.16                         |
| 05              |   |    | 11.              | 78.24                         |
| 06              |   |    | 13.              | 109.54                        |
| 07              |   |    | 15.              | 146.05                        |
| 08              |   |    | 17.              | 187.78                        |
| 09              |   |    | 19.              | 234.72                        |
| 10              |   |    | 21.              | 286.88                        |
| 11              |   |    | 23.              | 344.26                        |
| 12              |   |    | 25.              | 406.85                        |
| 13              |   |    | 27.              | 474.66                        |
| 14              |   |    | 29.              | 547.68                        |

| QN(up) |    |    | Freq (GHz) | A(U-L)   | B(L-U)   | Log(Tau) relative |
|--------|----|----|------------|----------|----------|-------------------|
| J      | K  | K1 |            |          |          |                   |
| 01     | 00 |    | 108.686    | 1.05E-05 | 1.66E+09 | 0.05              |
| 02     | 01 |    | 217.373    | 1.01E-04 | 1.11E+09 | 0.60              |
| 03     | 02 |    | 326.059    | 3.64E-04 | 9.96E+08 | 0.86              |
| 04     | 03 |    | 434.745    | 8.94E-04 | 9.48E+08 | 0.97              |
| 05     | 04 |    | 543.431    | 1.79E-03 | 9.22E+08 | 1.00              |
| 06     | 05 |    | 652.116    | 3.13E-03 | 9.05E+08 | 0.95              |
| 07     | 06 |    | 760.801    | 5.03E-03 | 8.94E+08 | 0.84              |
| 08     | 07 |    | 869.487    | 7.57E-03 | 8.85E+08 | 0.68              |
| 09     | 08 |    | 978.171    | 1.08E-02 | 8.79E+08 | 0.46              |
| 10     | 09 |    | 1086.855   | 1.50E-02 | 8.74E+08 | 0.20              |
| 11     | 10 |    | 1195.540   | 2.00E-02 | 8.69E+08 | -0.11             |
| 12     | 11 |    | 1304.222   | 2.61E-02 | 8.66E+08 | -0.47             |
| 13     | 12 |    | 1412.907   | 3.32E-02 | 8.63E+08 | -0.87             |
| 14     | 13 |    | 1521.589   | 4.16E-02 | 8.61E+08 | -1.31             |