# Answer on Question 55069, Physics / Astronomy | Astrophysics

## Question:

What is the minimum gas temperature of a molecular cloud that produces strong CO J = 5 −

4 line emission?

## Solution:

The minimum gas temperature of a molecular cloud can be calculated:

$$T\min = \frac{vh(J+1)}{2k} = 83K$$

**Answer: T min = 83 K**