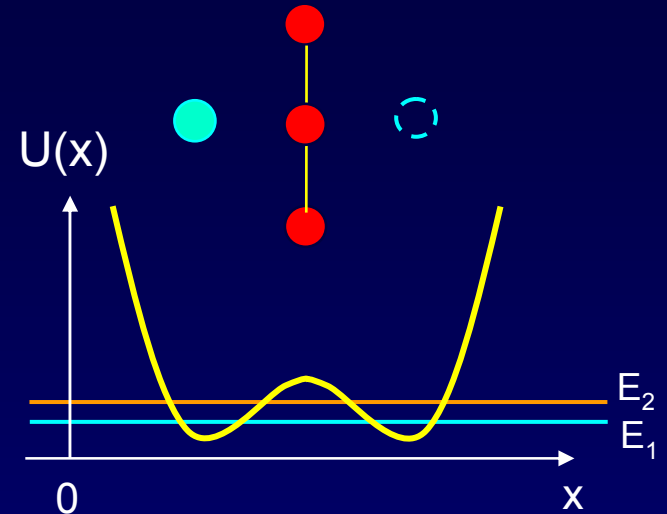


# The Ammonia Maser

Stimulated emission of radiation between these two lowest energy states of ammonia ( $\Delta E = 1.8 \times 10^{-4} \text{ eV}$ ) was used to create the ammonia maser, by C. Townes in 1954 (for which he won the Nobel prize in 1964).  
What wavelength of radiation does the maser emit?



The maser was the precursor to the laser. The physics is the same (more later).