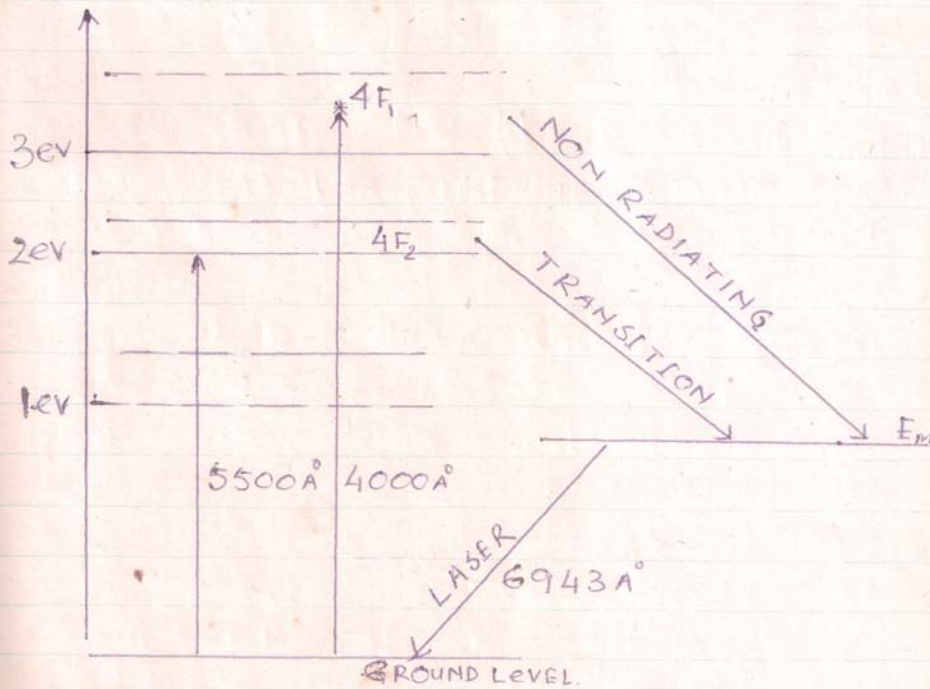




Energy Levels in Ruby (Solid State) Laser
(NOT to the scale):



The impurity of Cr^{+3} in a ruby crystal (Al_2O_3) absorbs light in UV, green and yellow colour ranges. The cavity resonance raises the atoms to the excited states $4F_1$ & $4F_2$.

The atoms relax to the metastable energy level and stay there for about 10^{-3} seconds. The excited atoms emit coherent light of 6943 \AA wave

