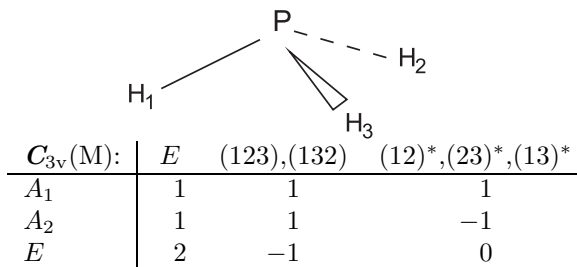


Fundamentals of Molecular Symmetry
 Week 10/11

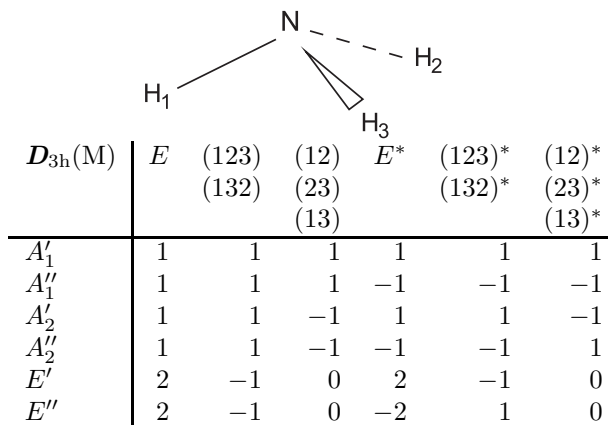
Exercises

10.1 Determine the spin statistical weight factors for $^{31}\text{PH}_3$ in the molecular symmetry group



^{31}P and ^1H both have $I = 1/2$.

10.2 Determine the spin statistical weight factors for $^{14}\text{NH}_3$ and $^{14}\text{ND}_3$ in the molecular symmetry group



^{14}N has $I = 1$ and so has a deuteron D.