

Direct Products 11

The Full Rotation Group (SU_2 and R_3)

$$\Gamma^{(j)} \times \Gamma^{(j')} = \Gamma^{(j+j')} + \Gamma^{(j+j'-1)} + \dots + \Gamma^{(|j-j'|)}$$

$$\Gamma^{(j)} \times \Gamma^{(j)} = \Gamma^{(2j)} + \Gamma^{(2j-2)} + \dots + \Gamma^{(0)} + [\Gamma^{(2j-1)} + \dots + \Gamma^{(1)}]$$