

$$\int_0^{+\infty} \int_0^\pi \int_0^{2\pi} R^2(r) Y^2(\theta, \varphi) r^2 \, dr \, d\theta \, d\varphi = 1$$

$$\int \int \int_0^{2\pi} R^2(r) Y^2(\theta, \varphi) r^2 \, dr \, d\theta \, d\varphi = 1$$