

Table of Normalized Spherical Harmonics

ℓ	m_ℓ	Y_{ℓ, m_ℓ}
0	0	$\left(\frac{1}{4\pi}\right)^{1/2}$
1	0	$\left(\frac{3}{4\pi}\right)^{1/2} \cos\theta$
	± 1	$\mp \left(\frac{3}{8\pi}\right)^{1/2} \sin\theta e^{\pm i\phi}$
2	0	$\left(\frac{5}{16\pi}\right)^{1/2} (3\cos^2\theta - 1)$
	± 1	$\mp \left(\frac{15}{8\pi}\right)^{1/2} \cos\theta \sin\theta e^{\pm i\phi}$
	± 2	$\left(\frac{15}{32\pi}\right)^{1/2} \sin^2\theta e^{\pm 2i\phi}$
3	0	$\left(\frac{7}{16\pi}\right)^{1/2} (2 - 5\sin^2\theta) \cos\theta$
	± 1	$\mp \left(\frac{21}{64\pi}\right)^{1/2} (5\cos^2\theta - 1) \sin\theta e^{\pm i\phi}$
	± 2	$\left(\frac{105}{32\pi}\right)^{1/2} \cos\theta \sin^2\theta e^{\pm 2i\phi}$
	± 3	$\mp \left(\frac{35}{64\pi}\right)^{1/2} \sin^3\theta e^{\pm 3i\phi}$