

Y_ℓ^m	Spherical Coordinates
Y_0^0	$\frac{1}{2\sqrt{\pi}}$
Y_1^{-1}	$\frac{1}{2}\sqrt{\frac{3}{\pi}}\sin(\phi)\sin(\theta)$
Y_1^0	$\frac{1}{2}\sqrt{\frac{3}{\pi}}\cos(\phi)$
Y_1^1	$\frac{1}{2}\sqrt{\frac{3}{\pi}}\sin(\phi)\cos(\theta)$
Y_2^{-2}	$\frac{1}{2}\sqrt{\frac{15}{\pi}}\sin^2(\phi)\cos(\theta)\sin(\theta)$
Y_2^{-1}	$\frac{1}{2}\sqrt{\frac{15}{\pi}}\sin(\phi)\cos(\phi)\sin(\theta)$
Y_2^0	$\frac{3}{4}\sqrt{\frac{5}{\pi}}\cos^2(\phi)$
Y_2^1	$\frac{1}{2}\sqrt{\frac{15}{\pi}}\sin(\phi)\cos(\phi)\cos(\theta)$
Y_2^2	$\frac{1}{4}\sqrt{\frac{15}{\pi}}\sin^2(\phi)\cos(2\theta)$