

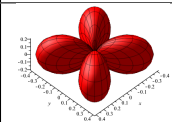
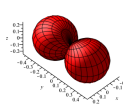
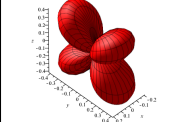
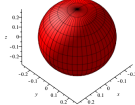
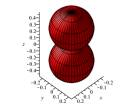
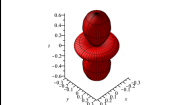
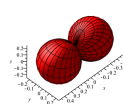
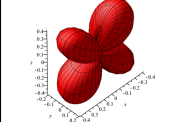
## Annex A. Low-Resolution Spherical Harmonics

Expressions of spherical harmonics are given in Table A.1 while three-dimensional views are given in Table A.2. As in Table A.1 expressions is given divided by  $1/2\sqrt{\pi}$ ,  $Y_0^0$  is omitted, because it equals to 1.

**Table A.1.** Spherical harmonics functions, divided by  $1/2\sqrt{\pi}$

$m$	$L = 1$	$L = 2$	$L = 3$
-3			$\frac{\sqrt{70}}{4}  \sin^3 \theta \sin 3\varphi $
-2		$\frac{\sqrt{15}}{2}  \sin^2 \theta \sin 2\varphi $	$\frac{\sqrt{105}}{2}  \cos \theta \sin^2 \theta \sin 2\varphi $
-1	$\sqrt{3}  \sin \theta \sin \varphi $	$\sqrt{15}  \cos \theta \sin \theta \sin \varphi $	$\frac{\sqrt{42}}{4}  \sin \theta (5 \cos^2 \theta - 1) \sin \varphi $
0	$\sqrt{3}  \cos \theta $	$\frac{\sqrt{15}}{2}  3 \cos^2 \theta - 1 $	$\frac{\sqrt{7}}{2}  \cos \theta (5 \cos^2 \theta - 3) $
1	$\sqrt{3}  \sin \theta \cos \varphi $	$\sqrt{15}  \cos \theta \sin \theta \cos \varphi $	$\frac{\sqrt{42}}{4}  \sin \theta (5 \cos^2 \theta - 1) \cos \varphi $
2		$\frac{\sqrt{15}}{2}  \sin^2 \theta \cos 2\varphi $	$\frac{\sqrt{105}}{2}  \cos \theta \sin^2 \theta \cos 2\varphi $
3			$\frac{\sqrt{70}}{4}  \sin^3 \theta \cos 3\varphi $

**Table A.2.** Three-dimensional views of spherical harmonics

	$L = 0$	$L = 1$	$L = 2$
$m = -2$			
$m = -1$			
$m = 0$			
$m = 1$			
$m = 2$			