■ **Kugelflaechenfunktionen – Visualisierung**

In[1]:= `Manipulate[ParametricPlot3D[Evaluate[{Sin[theta] Cos[phi], Sin[theta] Sin[phi], Cos[theta]}`
`Abs[SphericalHarmonicY[l, m, theta, phi]]], {phi, -Pi, Pi},`
`{theta, 0, Pi}, PlotRange → {{-.5, .5}, {-.5, .5}, {-1.1, 1.1}}, Mesh → False,`
`PlotPoints → {36, 18}, MaxRecursion → ControlActive[0, 2], ViewAngle → .246,`
`ImageSize → {500, 377}, Axes → False, SphericalRegion → True, Boxed → False],`
`{{l, 2, "l"}, 0, 7, 1, Appearance → "Labeled"}, {{m, 0, "m"}, -l, l, 1, Appearance → "Labeled"}]`

Out[1]=