

# Armónicos esféricos

$$Y_{0,0}(\theta, \phi) = \frac{1}{\sqrt{4\pi}}$$

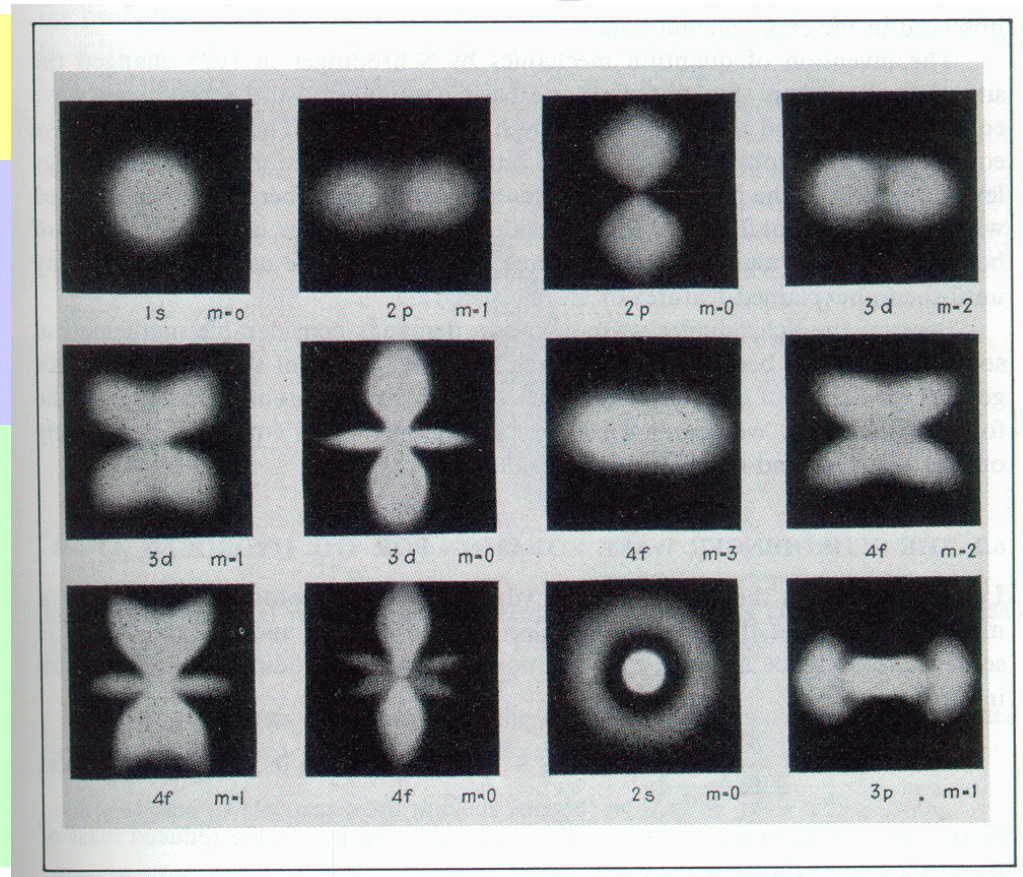
$$Y_{1,0}(\theta, \phi) = \sqrt{\frac{3}{4\pi}} \cos \theta$$

$$Y_{1,\pm 1}(\theta, \phi) = \mp \sqrt{\frac{3}{8\pi}} \sin \theta e^{\pm i\phi}$$

$$Y_{2,0}(\theta, \phi) = \sqrt{\frac{15}{8\pi}} (3 \cos^2 \theta - 1)$$

$$Y_{2,\pm 1}(\theta, \phi) = \mp \sqrt{\frac{15}{8\pi}} \sin \theta \cos \theta e^{\pm i\phi}$$

$$Y_{2,\pm 2}(\theta, \phi) = \sqrt{\frac{15}{16\pi}} \sin^2 \theta e^{\pm 2i\phi}$$



$Y_{l,m}(\theta, \phi)$  dependen de  $l = 0, 1, 2, 3, \dots$  y de  $m = -l, \dots, +l$