

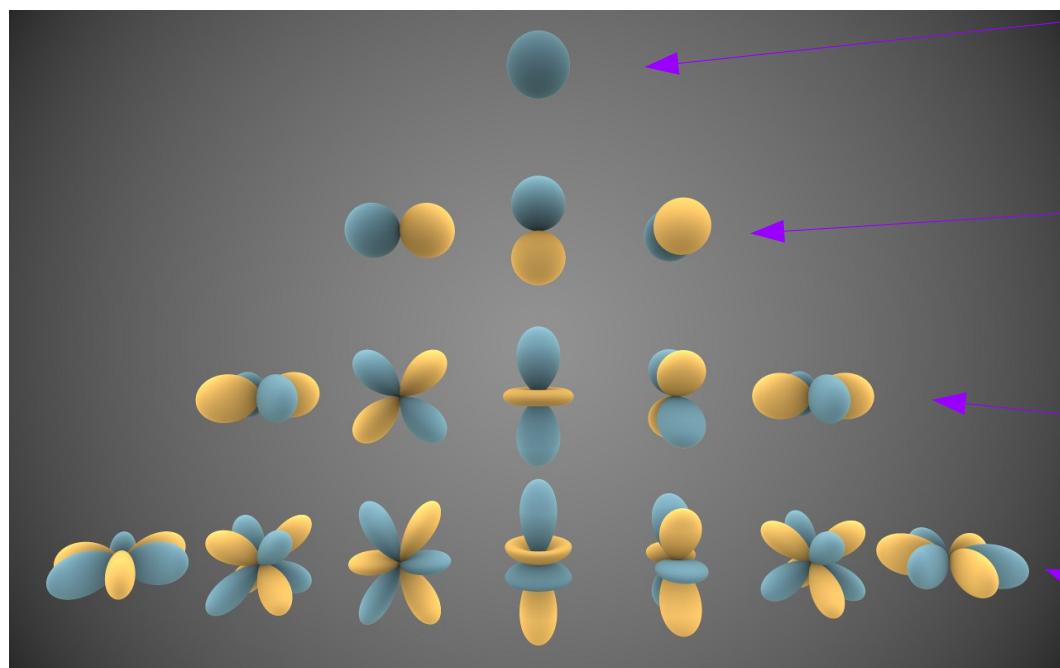
B2

# Symmetry and Relativity

## Lecture 6

# Spherical harmonics basis

- Invariant subspaces of rotations (“rotate in the same way”)



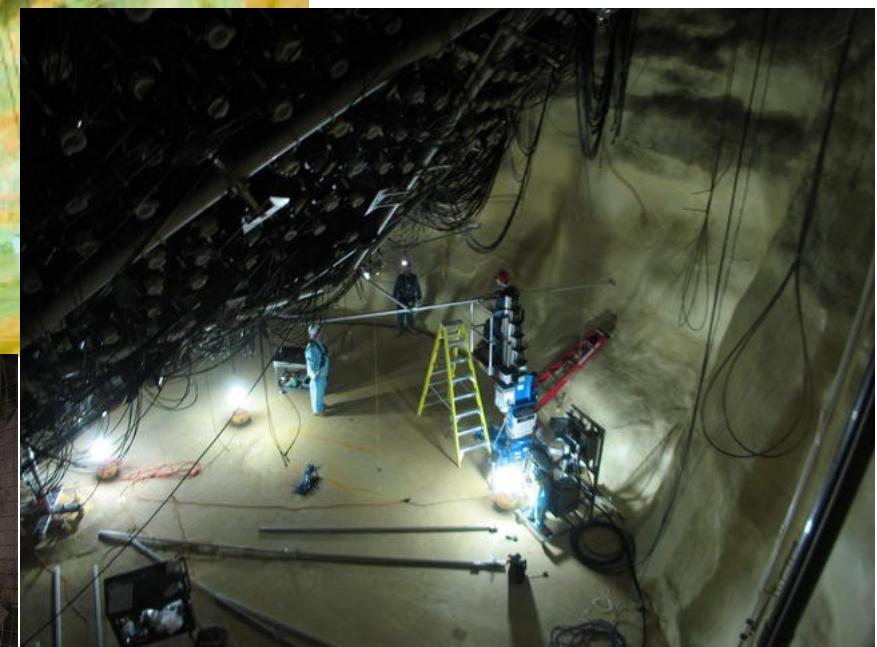
L=0: invariant wrt rotations  
(trivial representation)

L=1: need full  $2\pi$  rotation;  
representation isomorphic  
to full 3D rotations

L=2: same after  $\pi$  rotation

L=3: same after  $2\pi/3$  rotation

# SNO+



# SNO+

