

$$\vec{k}^+ = \vec{k}^- = 0$$

$$A^v(1) \rightarrow A^v(1^+ 1^-)$$

$$\beta \rightarrow |\beta^+ \bar{\beta}^- + \beta \bar{\beta}| =$$

maybe an analogy  
from the polarizations  
of light?

$$A^{vc}(1) = \langle \beta, \beta \rangle \rightarrow 2D$$

$$A^{vc}(1^+ 1^-) = \langle |\beta^+ \bar{\beta}^-, \beta \bar{\beta}^-, \beta \bar{\beta}^- \rangle \rightarrow 3D$$

Not isomorphic!

$$\text{Yet, } A^{vt}(1) = \langle \beta, \beta, \beta \rightarrow 0, \beta \rightarrow 0 \rangle / \text{v.d.} \rightarrow 3D$$

$$A^{vt}(1^+ 1^-) = \langle |\beta^+ \bar{\beta}^-, \beta \bar{\beta}^-, \beta \bar{\beta}^-, \beta \bar{\beta}^+, \beta \bar{\beta}^- \rangle / \text{v.d.s} \\ \rightarrow 3D$$