FIG. 3: The first four eigenvectors for a dimer given by equation $r(\theta)$ ; $a = 0.2$ and $h = 0.5$ (dotted line) and $h = 0.01$ (solid line).

## C.   Clusters of more than two particles

Smoother yet tight junctions would bring $(1/2 - \chi_2)$ closer to 0 than sharp and tight junctions. The reason is simple: smoother junctions have the two parts of the dimer farther apart.