

Quiz 7

Wednesday, April 19, 2017 12:33 PM

The Four Lowest Energy States of a Four Proton Chain

* Work in groups of 3.

* Assume periodic boundary conditions.

* Use this color convention:

color	Red	Purple	Blue	Yellow
phase	0	$\pi/2$	π	$3\pi/2$

- Make a model of the lowest energy wavefunction (bonding state)
- Make a model of the highest energy wavefunction (anti bonding state)
- Make models of the other two wavefunctions (non-bonding states)
- How can you distinguish between the two non-bonding states?
- Are the non-bonding states degenerate or non-degenerate?