



The diagram illustrates a 2D lattice structure with two layers. The top layer is labeled $\underline{z} = (1, 0)$ and the bottom layer is labeled $\underline{z} = (1, 1)$. Both layers are enclosed in dashed boxes. Each layer consists of four vertical pink cylinders. In the top layer, the first and third cylinders have yellow squares on top, and the second and fourth cylinders have red circles on top. In the bottom layer, the first and second cylinders have red circles on top, and the third and fourth cylinders have yellow squares on top. Horizontal dark red lines connect the top and bottom surfaces of the cylinders within each layer. Diagonal dark red lines connect the top surface of a cylinder in one layer to the bottom surface of a cylinder in the other layer. Specifically, in the top layer, diagonal lines connect the red circle on the second cylinder to the yellow square on the first cylinder, and the red circle on the fourth cylinder to the yellow square on the third cylinder. In the bottom layer, diagonal lines connect the red circle on the first cylinder to the yellow square on the second cylinder, and the red circle on the third cylinder to the yellow square on the fourth cylinder. Dashed lines also connect the yellow squares and red circles of the top layer to those of the bottom layer, showing a staggered arrangement.

$\underline{z} = (1, 0)$

$\underline{z} = (1, 1)$