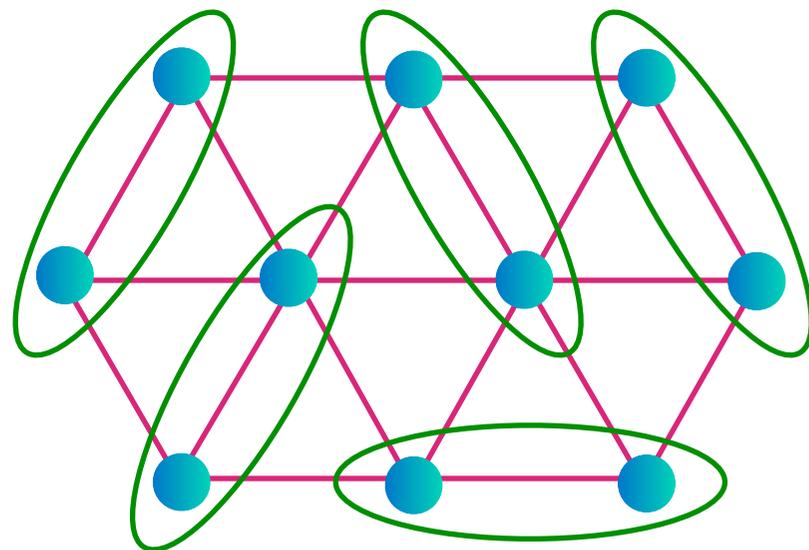


non-collinear
magnetic order

$$\langle Z_\alpha \rangle \neq 0$$



\mathbb{Z}_2 spin liquid

$$\langle Z_\alpha \rangle = 0$$

r_c

r