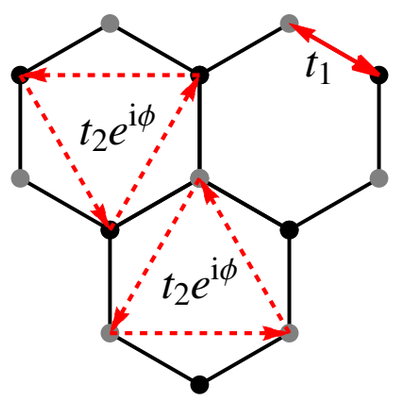
Competing Chiral Magnetic Orders in the Strongly Correlated Haldane-Hubbard Model

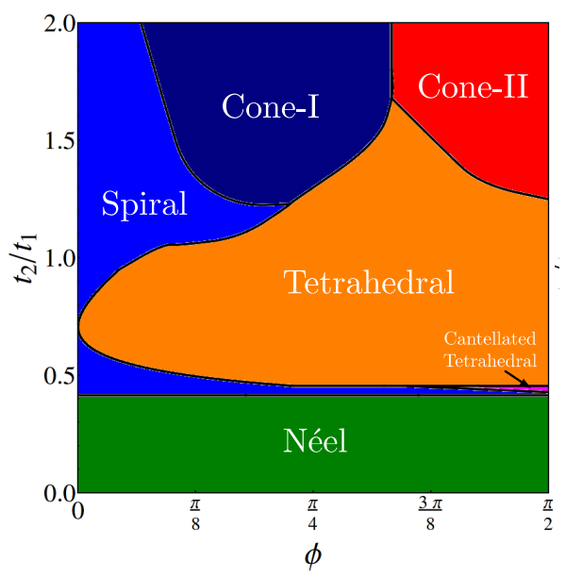
Ciarán Hickey[1], Pratik Rath[2], Lukasz Cincio[3], Zlatko Papic[3], Arun Paramekanti[1,4]
[1]University of Toronto, [2]IIT Kanpur, [3]Perimeter Institute, [4]CIFAR

2 x (

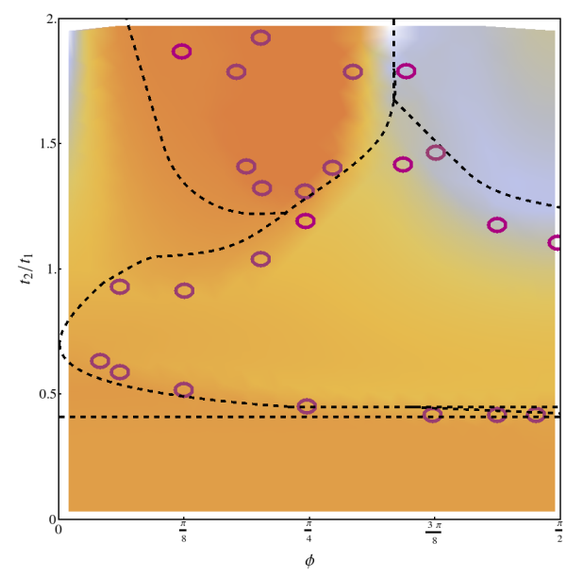
) + (Hubbard Interaction
U >> t_2, t_1)

||

Effective Spin Model



Classical Monte Carlo



Exact Diagonalisation