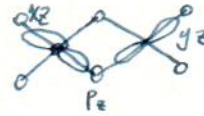
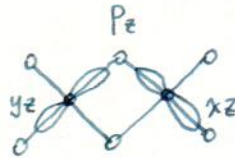
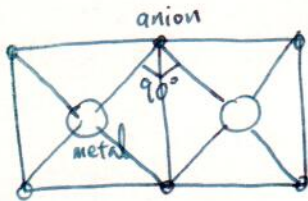


# Toward realizing quantum spin liquid phases

김홍석 박사님.

Necessary condition 1 : edge-sharing geometry



Necessary condition 2 :  $J=1/2$  physics

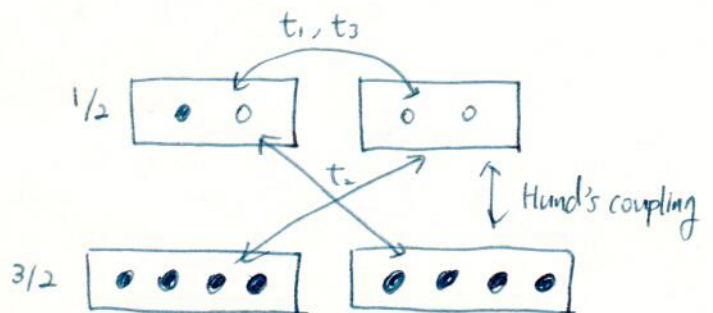
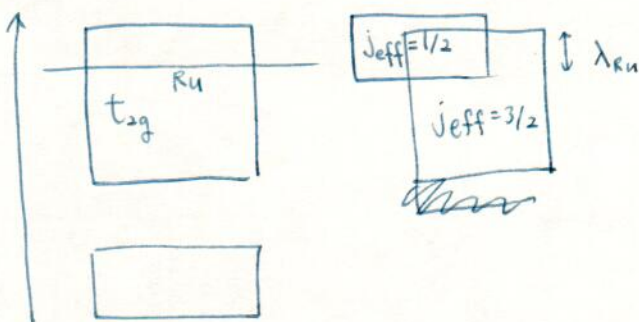
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(2)



stacked 2D honeycomb



3D hyper-honeycomb

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Further theoretical studies for the  $\Gamma$ -driven phase is needed.