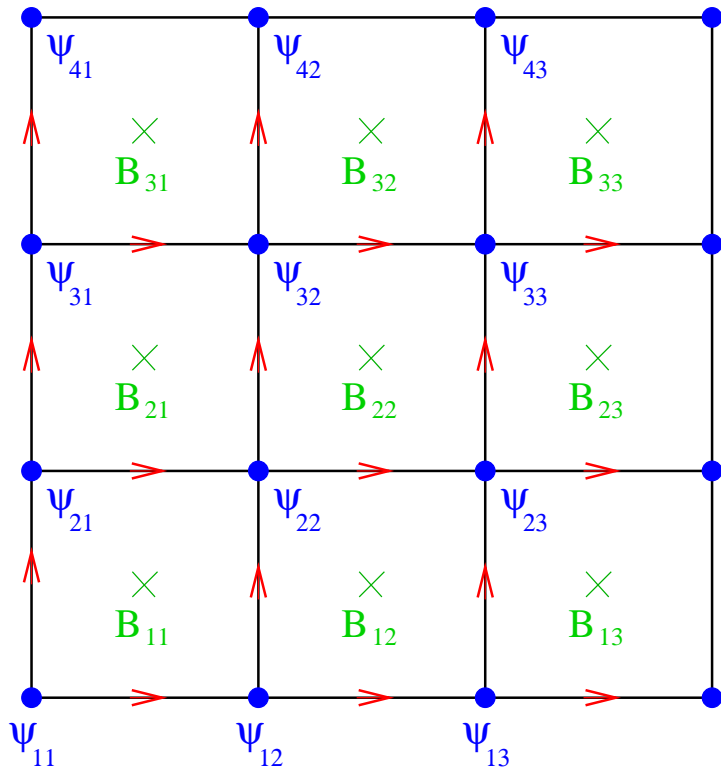


Computational aspects: a discrete formalism

(the situation in two dimensions)



Ψ_{ij} (Order Parameter values at
plaquette corners)

B_{ij}^z (Magnetic fields at
plaquette centers)

$J_{ij}^x, J_{ij}^y, A_{ij}^x, A_{ij}^y$

(Current and vector
potentials defined on
plaquette links)

(Typically we have at least a five grid points per coherence length to ensure convergence with respect to discretization.)