

A hexagonal lattice plot showing a phase transition. The lattice is composed of hexagons colored from dark blue to red, with a central region of red hexagons. The axes are labeled from 0 to 10. The plot shows a transition from a disordered state (blue/yellow) to an ordered state (red/black) as the parameter β increases. The central region of red hexagons represents the ordered phase, while the surrounding blue and yellow hexagons represent the disordered phase. The transition is sharp, occurring around $\beta \approx 4.5$.