Forceless Physics: Models with Hard Constrai Peter Winkler Dartmouth College

Phase transition in a statistical physics model can be caused solely by hard constraints, as in the hard-core lattice gas. We'll present a general framework for such models and discuss attempts to figure out when phase transition occurs,

e.g., on the Bethe lattice (joint work with Graham Brightwell) and even in space (with Lewis Bowen, Russ Lyons and Charles Radin).