Michael Damron*, 686 Cherry St, Atlanta, GA 30324, and Arnab Sen, 206 Church St. SE, Minneapolis, MN 55455. Majority vote model on regular trees and the median process.

In the majority vote model, each vertex of a graph is initially assigned a spin value of +1 or -1. At exponential times, vertices update their values by assuming the majority value of their neighbors. I will review some of the major questions and conjectures on lattices, and then explain some new work with Arnab Sen (Minnesota) on the 3-regular tree. We relate the majority vote model to a new model, which we call the median process, and use this process to answer questions about the limiting state of spins. For example, we show that when the initial state is given by a Bernoulli(p) product measure, the probability that a vertex's limiting spin is +1 is a continuous function of p. (Received August 06, 2019)