Two dimensional signed majority cellular automata

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I will study the complexity of signed automata on a planar grid. Over each vertex we consider the majority function with states -1 and 1. Each edge has a sign, so locally the majority consider the values in the neighborhood weighted by the edge's signs. Depending on the symmetry and uniformity of the signs distribution we determine the complexity of those networks: Turing Universality, P-Completeness related to some decision problems, etc. We also show that the asymmetric rules exhibit super polynomial cycles.