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*Political Geometry: Mathematical Interventions in Gerrymandering*

The U.S. has a unique electoral system that sets up congressional contests in frequently-redrawn regions. It’s a long-standing principle that the shapes of districts should be somehow reasonable, but this is very hard to formulate in a way that (a) is mathematically robust, (b) tracks together with our normative ideals about representative democracy, and (c) could persuade legislators, judges, and the public. This is only one of many places where mathematicians can make a meaningful intervention in the redistricting process. I'll discuss the problem as a geometer and from the point of view of social studies of science.