Jon Chaika and Arjun Krishnan* (arjun.krishnan@rochester.edu). Stationary coalescing walks on the lattice. Preliminary report.
Consider a measurable dense family of semi-infinite nearest-neighbor paths on the integer lattice $\mathbb{Z}^d$. If the measure on the paths is translation invariant, we completely classify their collective behavior in $d = 2$ under mild assumptions. We use our theory to classify the behavior of semi-infinite geodesics in random translation invariant metrics on the lattice; it applies, in particular, to first- and last-passage percolation. (joint work with Jon Chaika) (Received February 07, 2018)