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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)