1157-60-68 **Michael Damron*** (mdamron6@gatech.edu), 686 Cherry St., Atlanta, GA 30324, **David M Harper** (dharper80@gatech.edu), 686 Cherry St., Atlanta, GA 30324, **Jack Hanson** (jhanson@ccny.cuny.edu), 160 Convent Ave., New York, NY 10031, and **Wai-Kit Lam** (wlam@umn.edu), 206 Church St. SE, Minneapolis, MN 55255. *Critical first-passage percolation in two dimensions.* Preliminary report.

In first-passage percolation, one places i.i.d. nonnegative weights (t_e) on the edges of a graph and studies the induced pseudometric T. In the case of $\mathbb{Z}^2$, it is known that when $p := \mathbb{P}(t_e = 0)$ is $< 1/2$, $T(0, x)$ scales linearly in x, whereas when $p > 1/2$, it is stochastically bounded in x. I will discuss the so-called critical case, where $p = 1/2$. After reviewing work with X. Wang and W.-K. Lam, in which we solved for the exact scaling of $T(0, x)$ as a function of the distribution of t_e, I will talk about ongoing work with J. Hanson, D. Harper, and W.-K. Lam on a dynamical version of this process in which edge-weights update according to i.i.d. exponential clocks. I will present preliminary results on the dimension of sets of exceptional times during which there are (or are not) infinite paths of finite total passage time. (Received January 13, 2020)