1143-05-257 **Pu Gao** and **Xavier Pérez-Giménez***, (xperez@unl.edu), and **Cristiane Sato**. *Packing Edge-disjoint Spanning Trees in Random Geometric Graphs.* Preliminary report.

We consider the problem of packing edge-disjoint spanning trees in the random geometric graph $G(n, r)$. This was inspired by some earlier work on the $G(n, p)$ model, in which we proved that (with high probability) $G(n, p)$ contains exactly $\min(\delta, \lfloor m/(n-1) \rfloor)$ edge-disjoint spanning trees, where m is the number of edges and δ is the minimum degree. This result has been recently extended to the random geometric setting for all r such that $\delta < \epsilon \log n$. In particular we show that, for r in that range, $G(n, r)$ contains (with high probability) δ edge-disjoint spanning trees, and obtain the corresponding hitting-time result for the random graph process in which edges are added one by one in increasing order of length. (Received August 15, 2018)