1067-05-790 **Amir Barghi*** (amir.barghi@dartmouth.edu) and **Peter Winkler**. *Firefighting on Random Geometric Graphs.* Preliminary report.

In the Firefighter Problem which was first introduced by Hartnell [1] in 1995, a fire starts at a vertex of a graph and in discrete time intervals spreads from burned vertices to their neighbors, unless they are protected by one of the f firefighters that are deployed every turn. Once protected, a vertex remains protected. We assume that the trees in a forest are randomly distributed with a fixed density and fire spreads from one tree to another if their distance is less than one. In this talk, we will discuss a technique from percolation that helps us prove that stopping the fire from spreading indefinitely, requires a linear relation between f and the density of the forest.

References

[1] B. L. Hartnell, *Firefighter! An Application of Domination*, presentation at the Twentieth Conference on Numerical Mathematics and Computing, University of Manitoba, 1995.

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