

PROTECTION NUMBER IN RECURSIVE TREES

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The protection number of a tree is the minimal distance from its root to a leaf. In this talk we are interested in the protection number of a uniformly chosen random recursive tree of size n . Due to different construction of plane oriented and non-plane recursive trees we consider them separately. We use the singularity analysis of derived generating functions to find out the number of relevant trees, which leads us to the probability distribution of the protection number.