

Peer Review

Review of: "Aspects of a Randomly Growing Cluster in $\mathbb{R}^2$, $d \geq 2$ "

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This is an interesting short paper, which introduces a spatial variant of the random recursive tree, in which the i 'th edge has d -dimensional $\text{Normal}(0, i^{-\alpha})$ length.

The focus of the paper is on the diameter and minimum spanning tree.

The proofs are clearly written and seem like optimal proofs.

I have no criticism -- this is certainly deserving of publication.

One suggestion.

Instead of regarding the limit as the countable set XX_∞ , it is surely more elegant to take the limit of the uniform distribution on XX_n , which should be a random probability distribution on $\mathbb{R}^d$ whose support is the closure of XX_∞ (usually, such limit assertions have straightforward martingale proofs). See, for instance, the analysis of a somewhat similar model in MR3813984

Declarations

Potential competing interests: No potential competing interests to declare.