

Treewidth of random geometric graphs

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joint work with Tobias Müller(Utrecht)

We prove a conjecture of Mitsche and Perarnau [1] stating that the treewidth $tw(G) = \Theta(r\sqrt{n})$ of random geometric graph $G \in \mathcal{RGG}(n, r)$ for all $r > r_c$, in which r_c is the threshold radius for the appearance of the giant component in $\mathcal{RGG}(n, r)$.

References.

[1] D.Mitsche and G.Perarnau, On treewidth and related parameters of random geometric graphs, *STACS'12*, 2012

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