

# Maximum degree in random planar graphs

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We discuss recent results on the maximum degree of random planar graphs with fixed average degree and compare them to related classical results in the Erdős-Rényi random graph. We show that the maximum degree in a random planar graph is concentrated on two values if the average degree is at most two. In contrast, this is not true any more when the average degree is larger than two. In this case we prove that the maximum degree is not concentrated on any subset with bounded size. Furthermore, perhaps surprisingly, the maximum degree in a random planar graph does not grow as we increase the average degree from one to two.

This talk is based on joint work with Mihyun Kang.