

Institut für Diskrete Mathematik

**Combinatorics Seminar**

Friday 24th September 14:15

Online meeting (Webex)

**The longest induced path in a sparse random graph**

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A long-standing problem in random graph theory has been to determine asymptotically the length of a longest induced path in sparse random graphs. Independent work of Łuczak and Suen from the 90s showed the existence of an induced path of roughly half the optimal size, which seems to be a barrier for certain natural approaches. Recently, in joint work with Draganić and Krivelevich, we solved this problem. In the talk, I will discuss the history of the problem and give an overview of the proof.

Meeting link:

<https://tugraz.webex.com/tugraz/j.php?MTID=ma70275cd258e7748417214793956c7bf>

Meeting number: 188 980 7021

Password: ahMZ84fJYQ2

Joshua Erde, Mihyun Kang