The largest common subtree of uniform attachment trees

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Abstract: I will talk about a project that started at the Rand-NET Workshop on Random Graphs in Eindhoven in 2022. Consider two independent uniform attachment trees with n nodes each – how large is their largest common subtree? Our main result gives a lower bound of $n^{0.83}$. We also give some upper bounds and bounds for general random tree growth models. This is based on joint work with Johannes Bäumler, Bas Lodewijks, James Martin, Emil Powierski, and Anirudh Sridhar. Time permitting, I will discuss recent advances in random graph matching, which partially motivate the question above.