

Talk 2: Uniform trees and Cayley trees

Speakers. Finn Michler & Alexander Seidl

Date. Thursday, March 7.

Reference material

[Cur]: Sections 4.3.2, 4.3.3

Goal

The goal is to see applications of the coding of Bienaymé–Galton–Watson trees by conditioned random walks.

Content

- Uniform plane trees are conditioned BGW trees with geometric offspring distribution (Proposition 4.7) and proof of Corollary 4.6.
- Height of a typical vertex of a uniform plane tree (Corollary 4.8)
- Cayley trees are conditioned BGW trees with Poisson offspring distribution (Proposition 4.9)

References

[Cur] Nicolas Curien. A random walk among random graphs (lecture notes). <https://www.dropbox.com/scl/fi/xgb6yed67rzwynauuagy/cours-GA-online.pdf?rlkey=e10jhac0y9s49ly331il4ydjq&dl=0>.