

Second report on A 2-spine decomposition of the critical Galton-Watson tree and a probabilistic proof of Yaglom's theorem

June 12, 2018

The authors have done an excellent job on the corrections, and I am now very happy with the paper. I noticed a few more very minor issues, mostly grammatical, which I have listed below.

1. pp3, second paragraph: you later use \dot{L} and don't define it. Replace "Denote by \ddot{L} an $L(L-1)$ -transform of L " with "Denote by \dot{L} and L -transform of L , and by \ddot{L} an $L(L-1)$ -transform of L ."
2. pp4, lines 1+2, "with $E[X] \in (0, \infty)$, then" should be "with $E[X] \in (0, \infty)$. Then"
3. pp6, line 1: "implies" should be "imply"
4. pp6, line 2: "used in Geiger [3]" should be "used by Geiger [3]" or "used in [3]"
5. pp6, line 3: "Due to similar reasons" should be "For similar reasons"
6. pp6, line 7: " $(0, \infty)$, then" should be " $(0, \infty)$; then"
7. pp9, (2.5): Use

`\qedhere`

to get the QED mark on the same line as the last display.

8. pp9, Prop 2.1: "Then, we have" should just be "Then"
9. pp11, top: "descendant of j th particle" should be "descendant of the j th particle"
10. pp11, middle: "implies that $q_n \uparrow 1$ while $n \rightarrow \infty$ "—it would be more standard to write "implies that $q_n \uparrow 1$ as $n \rightarrow \infty$ "
11. pp11: "Now combining (3.1) with above" should be "Now combining (3.1) with the above"
12. pp11, end of proof of Thm 1.1(1): Maybe align the \longrightarrow with the last equals sign on the line above, and again use `qedhere` to get the QED mark in the right place.
13. pp12, just after (3.3): "Then, for each $\lambda > 0$ " should be "Then, for each $\lambda \geq 0$ " (you need to take $\lambda = 0$ to get the claim at ρ).