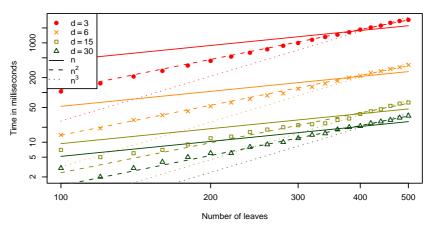
## Time usage for the O(n+|V||V'|min{id,id'}) algorithm on worst case trees worst case n<sup>2</sup> n<sup>3</sup> 100 200 300 400 500 Number of leaves

## Time usage for the O(n+|V||V'|min{id,id'}) algorithm on d-ary trees



## Time usage for the O(n+|V||V'|min{id,id'}) algorithm on random topology and r8s-based tree

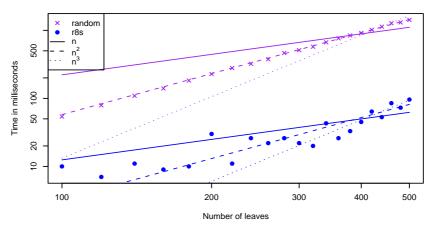


Figure 3 Experimental running times. The running time of the algorithm for worst case trees, d-ary trees and random trees. The lines plots the polynomials c.  $n^i$ , where c is a fitted constant and  $i \in [1, 4]$ . The two bottommost plots are in log-scale on both the x- and y-axis.