

Innappropriate parameterization of fossilized birth-death models causes incorrect estimates of topology and node ages

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Today

OUTLINE

- ▶ Overview: The Fossilized-Birth Death Process
- ▶ Our Research Question
- ▶ Methods
- ▶ Results

FOSSILIZED BIRTH-DEATH PROCESS

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- ▶ A probabilistic model for estimating divergence times

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OUR RESEARCH QUESTION

Is this an inherent property of 'total-evidence' approaches, or is this related to model misspecification?

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- ▶ Simulate different values for λ, μ, ψ

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- ▶ Empirical Data
 - ▶ Bear data set of Heath et al. 2014.

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- ▶ Estimation
 - ▶ Estimate a tree for each dataset using both sampled ancestor and non-sampled ancestor models in BEAST2

RESULTS