STATS 700-002 Class 2. The coalescent

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The coalescent

Kingman, J. F. C. (1982). The coalescent. *Stochastic Processes and their Applications*, 13(3), 235-248. https://doi.org/10.1016/0304-4149(82)90011-4.

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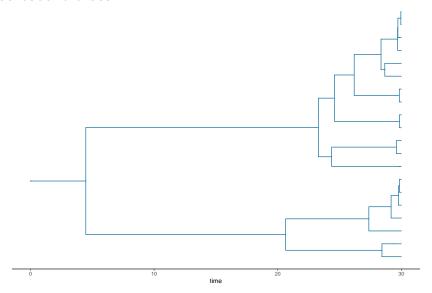
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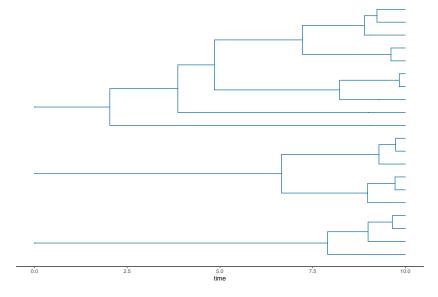
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Coalescent trees





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- ▶ Why does equation (2.1) hold?
- ► How can we see why equation (2.2) holds?

Theorems 3 and 4

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- ▶ What is accomplished by Theorem 4?

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- ▶ What is the relevance of Kingman's coalescent to practical phylodynamic inference?
- ▶ Given what we know at this point, how might Kingman's coalescent be used?
- ▶ What extensions can you envision?

▶ What is the relationship between the paintbox construction and a genealogical tree?

Bibliography I

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