

STATS 700-002 Class 2. The coalescent

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The coalescent

Section 1

- ▶ How does the construction of section 1 relate to a genealogical tree?
- ▶ What does the assumption (1.3) mean?
- ▶ Is the relation \prec defined in (1.4) an order relation?
- ▶ Verify that $q_\xi = \binom{|\xi|}{2}$, as claimed in (1.6).
- ▶ In terms of genealogical trees, what is the interpretation of the D_t process introduced in (1.8)?
- ▶ In terms of genealogical trees, what does the *transit time* T introduced in (1.11) correspond to?

Theorem 1

- ▶ Why does equation (2.1) hold?
- ▶ Verify equation (2.2).

