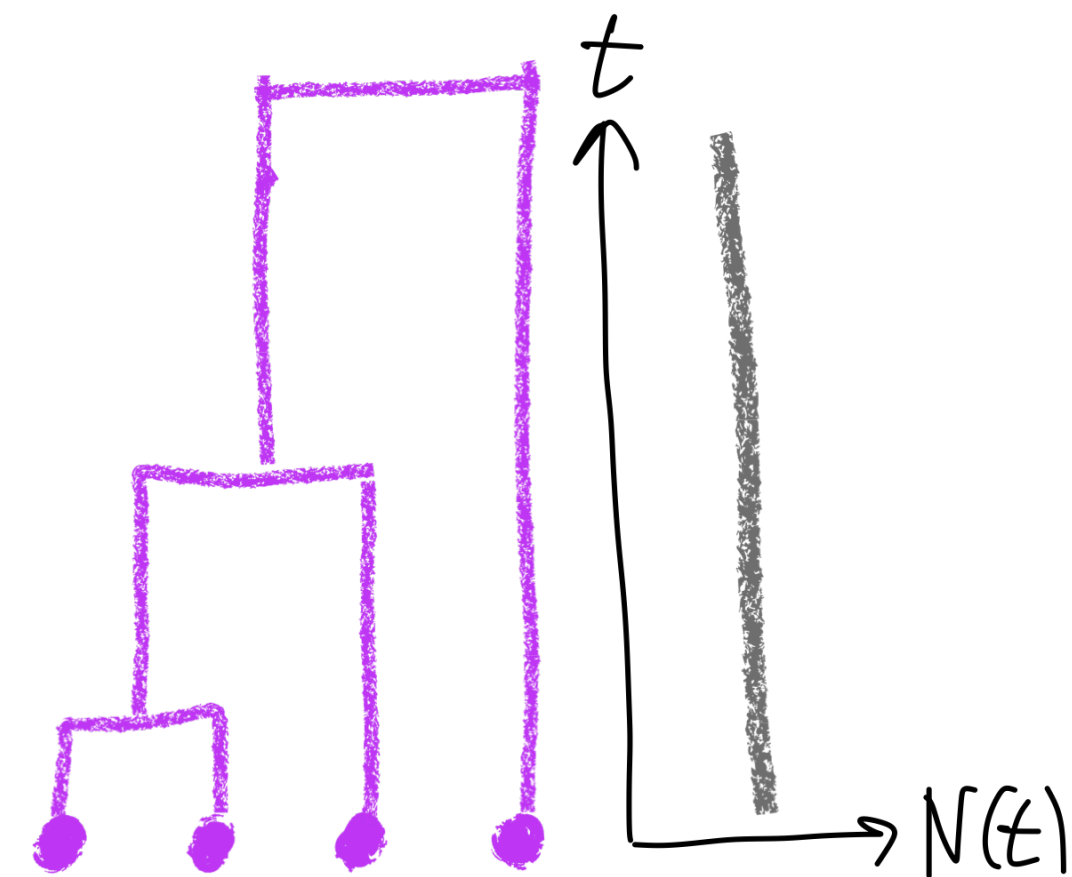


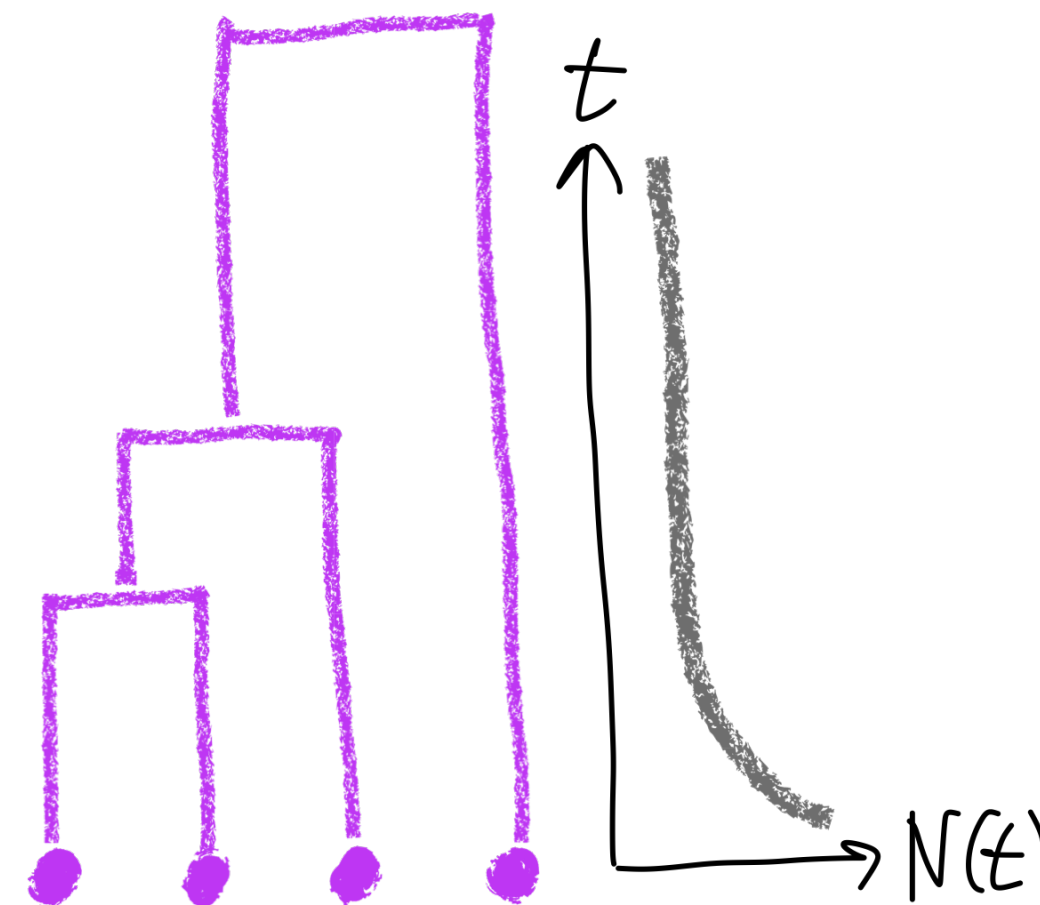
Coalescent theory

Population size determines coalescence rate

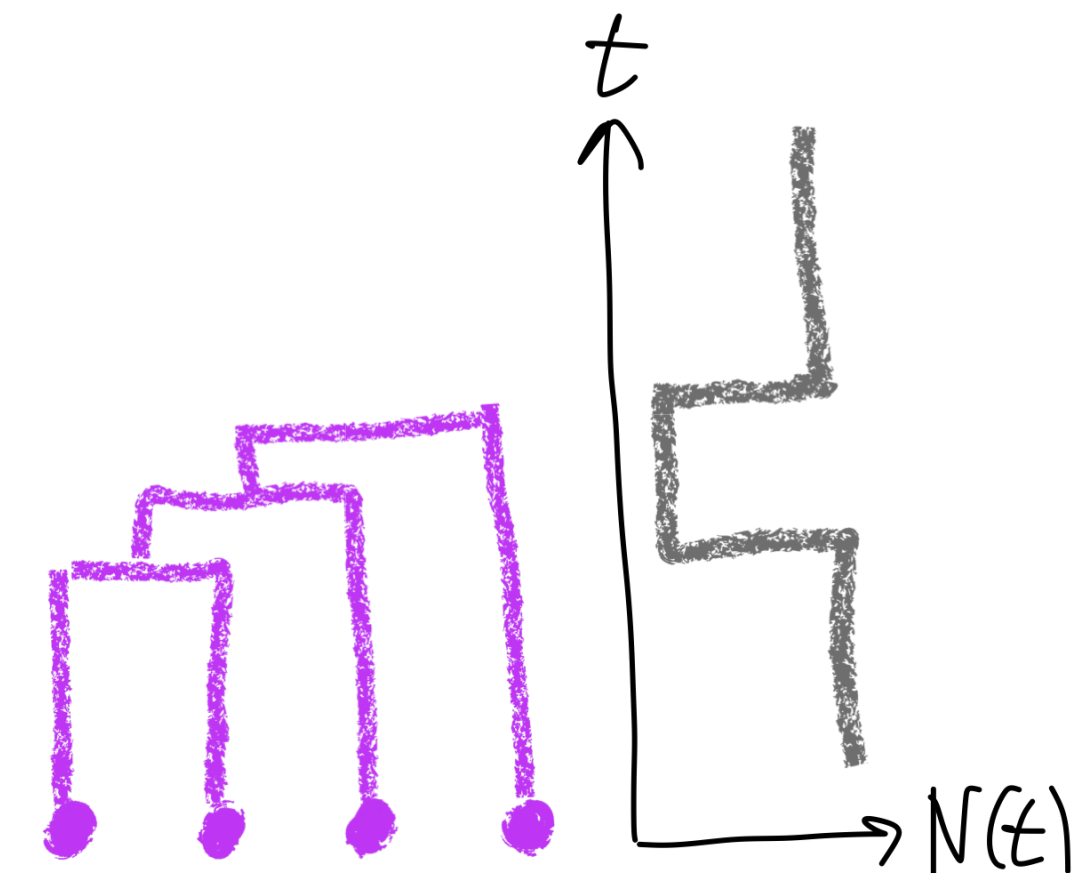
Constant



Exponential growth

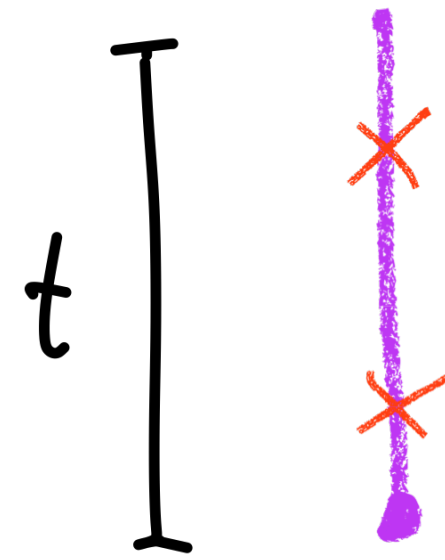


Bottleneck



Coalescent theory

Mutations



mutations on branch of length t
is Poisson rv w/ mean μt

$$IP(k | t) = \frac{(\mu t)^k e^{-\mu t}}{k!}$$

↑ mutations per genome per generation