

Recap

Good to know for homework

Intercoalescent times are indep. exponential rvs

intercoalescent interval i

diploid pop size

sampled haplotypes

$$T_i \sim \exp\left(\frac{2N}{\binom{i}{2}}\right), \text{ for } i = n, n-1, \dots, 2$$

mutations on branches are indep. Poisson rvs

$$k \sim \text{Pois}(Mt)$$

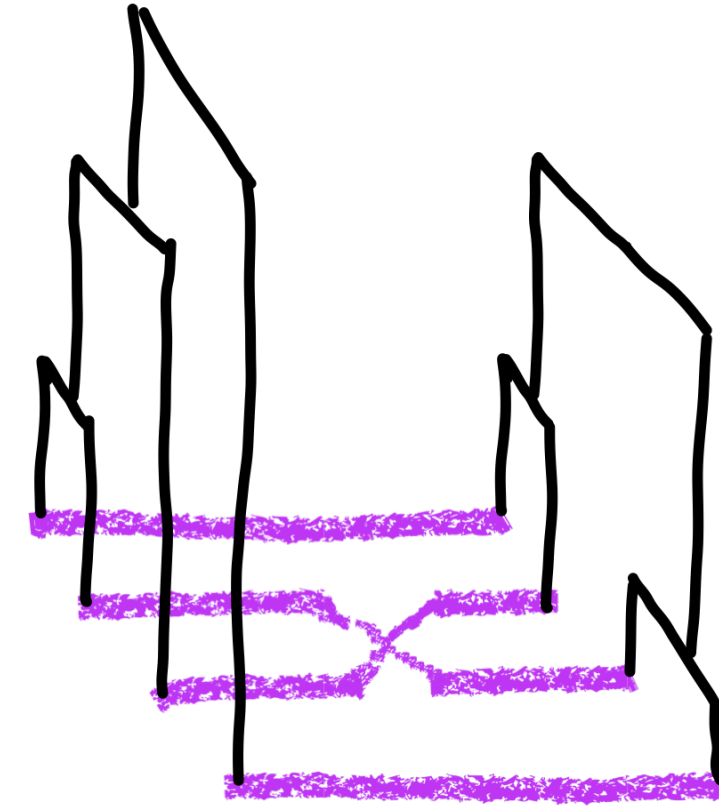
mutations

mutation rate

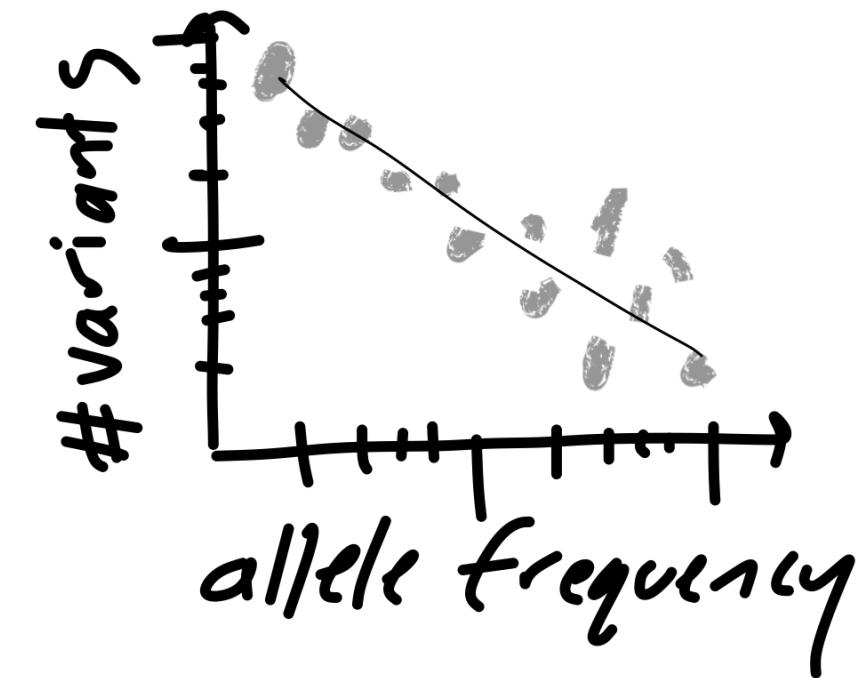
branch length

Next time

- The coalescent with recombination



- Sample Frequency Spectrum (SFS)



- Coalescent hidden Markov model

