Coalescent theory
Only slightly fancier

time	Cole-escent	coalescent
time	classes into the future	generations into the past
events	dice rolls, one student	coalescences, pairs of individuals
rate of events w/ i individuals	$\frac{i}{N}$ ← students uncalled ← class size	$\frac{\binom{i}{2}}{2N}$ ← $= \frac{1}{2}i(i-1)$, # pairs ← population size ↑ if diploid

Coalescent theory

Watch those factors of 2!

Haploid population $N = 6$

T_2

two haploid individuals

$n = 2$ sampled haplotypes

Diploid Population $2N = 6$ $(N = 3)$

one diploid individual

$n = 2$ sampled haplotypes