

Evolution rates

- dangers of extrapolation
 - diff evol rate
- mutual information
- MFPT to get to $\frac{1}{2}$ similarity

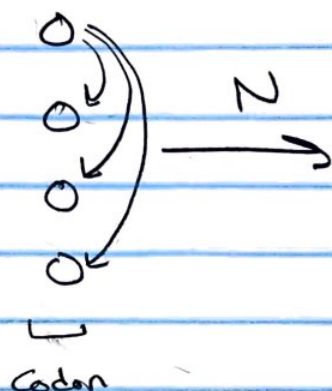
DNA size

- mean size of DNA given rates
- DNA current

Mtrans

- Secondary rate of transposon failure

Evolution Rates



$$\Omega = (4 \times 4) \times N$$

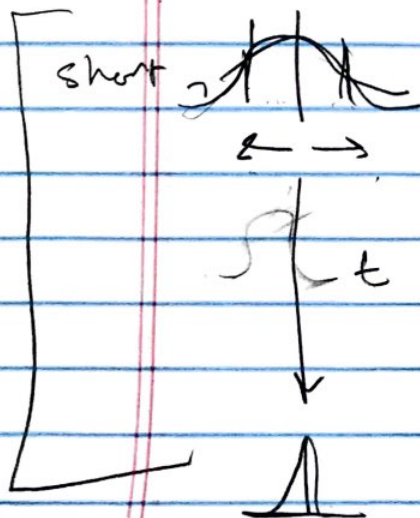
States = [A ... G ... C]

- Assumptions**
- Ignoring mutation checkers which will prioritize certain codons
 - $P(n)$ (just do computationally)
 - Mutation rates between codons
 - $PAG, RAT, etc.$
 - Independent mutations

- Numbers**
- Run it at time step of copying
 - Store the state
 - Imposing different viewed timesteps how it averages
 - rate of change \rightarrow extrapolate in time
 - ~~begin~~ expect herself to evolve super rapidly if only looking at short time steps
 - Slow down & see stability

time to get $\frac{1}{4}$ similarity \approx MFPT

Complete Random



Monte Carlo

Run
State(t)

\downarrow

