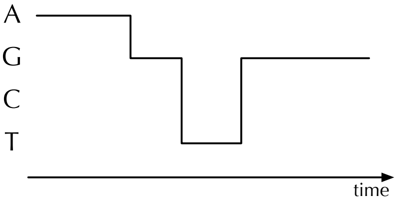
Gillespie's Algorithm



- Start by sampling X_0 from initial distribution λ.
- When in state i, wait in state for an amount of time distributed as

$$\mathrm{Exp}(|R_{ii}|)$$

- At end of waiting time, transition to a different state j $\neq$ i with probability

$$\frac{(R_{i1}, \ldots, R_{ij-1}, 0, R_{ij+1}, \ldots, R_{iK})}{|R_{ii}|}$$