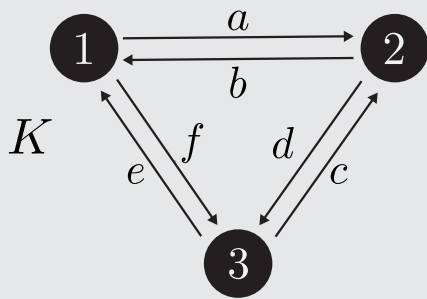


1. initialize a 3-vertex graph K at equilibrium



randomly sample parameters for K such that:

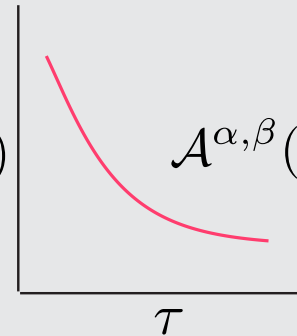
$$\tilde{A}(C) = \ln (ade/bfc) = 0$$

calculate the Steinberg signature:

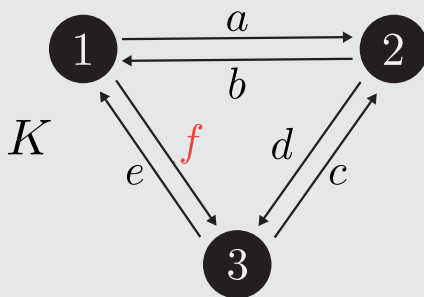
$$\mathcal{A}^{\alpha,\beta}(\tau)$$

$$\mathcal{A}^{\alpha,\beta}(\tau) = \mathcal{A}^{\beta,\alpha}(\tau)$$

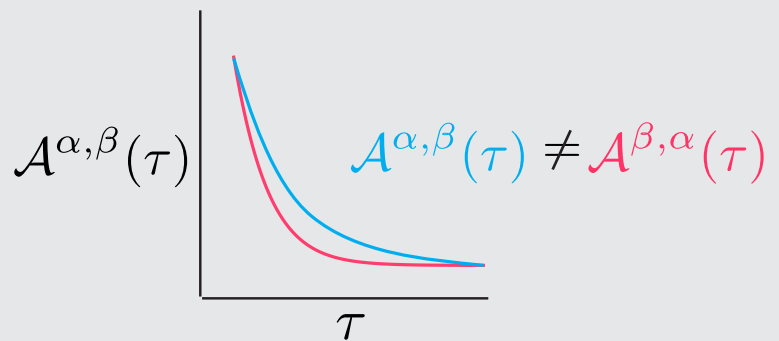
at equilibrium:  $\mathcal{I}^{\alpha,\beta}(G) = 0$



2. increase a single parameter from its equilibrium value



new  $f = f * 1.01$



$\tilde{A}(C) = \ln (ade/bfc) \neq 0$  away from equilibrium:  $\mathcal{I}^{\alpha,\beta}(G)$  non-zero



3. repeat N times

4. plot the Steinberg signature against the cycle affinity

