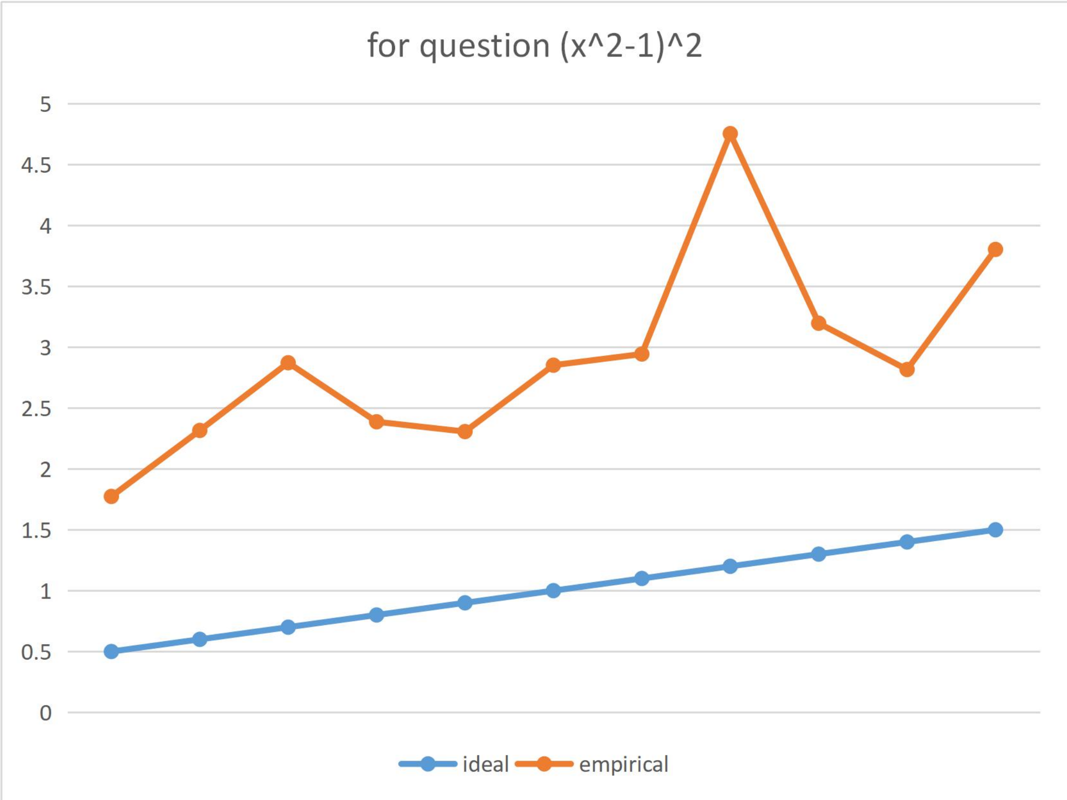

Abscissa is α (from 0.5 to 1.5)and ordinate is the value of $\varepsilon^{\alpha} E_{w_0}(T^i(\varepsilon))$.

We need to verify

$$\varepsilon^{\alpha} E_{w_0}(T^i(\varepsilon)) \to q_1^{-1}$$

here $q_1 = q_{12} = \alpha$.

SDE

$$dw_t^{\varepsilon} = -\nabla f(w_t^{\varepsilon})dt + \varepsilon dL_t^{\alpha}$$

Euler method

$$w_{t+\Delta t} = w_t - 4w_t(w_t^2 - 1)\Delta t + \varepsilon S_{\Delta t}^{\alpha}$$

$$S_{\Delta t}^{\alpha} \sim S\alpha S(\Delta t^{1/\alpha})$$

Transition time

$$T^i = \inf\{t \geq 0 : w_t^{\varepsilon} \in \bigcup_{j \neq i} B_j\}$$

$$B_i = \{|x - m_i| \leq \delta\}$$