

Probability of Identity, $\psi(r)$

One Long Jump

$$\psi = 2^{\alpha-1} \sin(\pi\alpha/2) \Gamma(1 + \alpha/2)^2 \frac{D_\alpha}{\pi^2 \rho \mu^2} r^{-2-\alpha}$$

One Quick Jump

$$\psi = \frac{\Gamma(1 - \alpha/2)}{2^\alpha \Gamma(\alpha/2)} \frac{r^{-2+\alpha}}{\pi D_\alpha \rho}$$

Diffusive Spreading

$$\psi = \frac{\text{Log}(\bar{x}/r)}{4 D_2 \rho \pi + \text{Log}(\bar{x}/\delta)}$$

Initial Contact

$$\psi = (1 + [2^{2+\alpha/2} \pi / \Gamma(1 - \alpha/2)] D_\alpha \rho \delta^{2-\alpha})^{-1}$$

Initial Contact

$$\psi = \frac{\text{Log}(\bar{x}/\delta)}{4 D_2 \rho \pi + \text{Log}(\bar{x}/\delta)}$$