

Probability of Identity,  $\psi(x)$

One Long Jump

$$\psi \propto \frac{D_\alpha}{\rho \mu^2} x^{-1-\alpha}$$

One Quick Jump

$$\psi \propto \frac{x^{-1+\alpha}}{D_\alpha \rho}$$

Initial Contact

$$\psi \sim \delta^{-1+\alpha} / (D_\alpha \rho)$$

Superdiffusive Spreading

$$\psi = \frac{e^{-(x/\bar{x})^{\alpha-1}}}{2 \alpha \sin(\pi / \alpha) \rho \mu \bar{x} + 1}$$

Diffusive Spreading

$$\psi = \frac{e^{-x/\bar{x}}}{4 \rho \mu \bar{x} + 1}$$

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Probability of Identity,  $\psi(r)$

$\bar{x}$

One Long Jump

$$\psi \propto \frac{D_\alpha}{\rho \mu^2} r^{-2-\alpha}$$

$\delta$

One Quick Jump

$$\psi \propto \frac{r^{-2+\alpha}}{D_\alpha \rho}$$

Diffusive Spreading

$$\psi \sim \frac{\text{Log}(\bar{x}/r)}{D_2 \rho}$$

Initial Contact

$$\psi \sim \delta^{-2+\alpha} / (D_\alpha \rho)$$

Initial Contact

$$\psi \sim \text{Log}(\bar{x}/\delta) / (D_2 \rho)$$