

2 Dimensional Probability of Identity,  $\psi(x)$

Distance,  $x$

One Long Jump

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

One Quick Jump

$$\psi \sim \frac{x^{-2+\alpha}}{D_{\alpha} \rho}$$

Diffusive Spreading

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

Initial Contact

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

Initial Contact

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

Tail Parameter,  $\alpha$

2

$x_l$

$\delta$