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

One Long Jump

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

One Quick Jump

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

Initial Contact

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

Superdiffusive Spreading

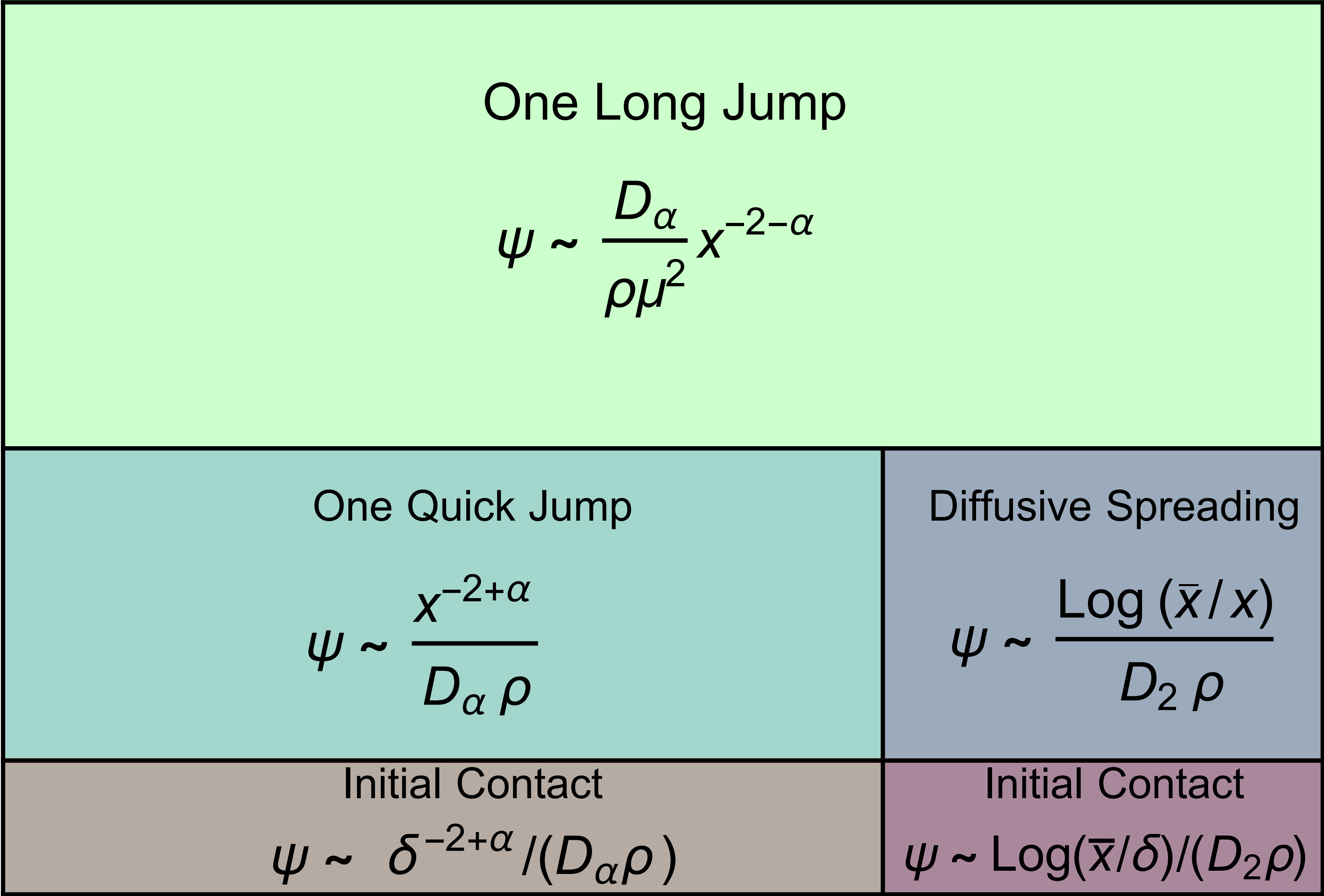$$\psi(0)-\psi \sim \frac{x^{\alpha-1}}{D_\alpha\,\rho}$$

Diffusive Spreading

$$\psi \sim \frac{e^{-x/\bar{x}}}{\sqrt{\mu\,D_2}\,\rho}$$

Distance, x

$\bar{x}$

δ

Tail Parameter, α

1

2

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

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

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

Distance, x

$\bar{x}$

δ

2

Tail Parameter, α