Probability of Identity, $\psi(x)$

One Long Jump

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

 \overline{X}

δ

One Quick Jump

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

Initial Contact

$$\psi = (1 + [2^{(\alpha+3)/2}\pi/\Gamma(1/2 - \alpha/2)]D_{\alpha}\rho\delta^{1-\alpha})^{-1}$$

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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