

Probability of identity $\psi(x)$ in two dimensions

Distance, x

\bar{x}

δ

One long jump
 $\psi \sim (D_\alpha / \rho \mu^2) x^{-2-\alpha}$

Coalescence vs dispersal

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

Diffusive spreading

$$\psi \sim \ln(\bar{x}/x) / (D\rho)$$

Initial contact

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

Initial contact

$$\psi \sim \ln(\bar{x}/\delta) / (D\rho)$$

1

2

Dispersal tail exponent, α