

Spatial Point Pattern Analysis with **spatstat**: :cheatsheet

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Importing data

spatstat::ppp(x, y, window, ...)

Creates a point pattern object

spatstat::as.ppp(X, W, ...)

Converts data to point pattern object

spatstat::ripras(x, y, shape, ...)

Estimates observation window from points

spatstat::marks(x)

Extract/change the marks attached to point pattern object

Summary functions

spatstat::Kest(X, ...)

Estimates Ripley's K function

spatstat::Lest(X, ...)

Estimates the L-function

spatstat::pcf(X, ...)

Estimates the pair correlation function

spatstat::eval.fv(expr, ...)

Evaluates expression involving function value objects

Point processes

spatstat::rpoispp(lambda, owin, ...)

Simulates homogeneous/inhomogeneous Poisson process

spatstat::rThomas(kappa, scale, mu, ...)

Simulates Thomas cluster process

spatstat::kppm(X, ...)

Fits cluster process to ppp object

spatstat::simulate.kppm(object, nsim, ...)

Generates simulated realisations from a fitted cluster point process model

Basics

summary(X, ...)

Prints basic summary of ppp object

plot(X, ...)

Plots ppp object

spatstat::density.ppp(x, ...)

Estimates intensity function from a ppp object

Simulate null models

spatstat::envelopes(Y, fun, nsim, ...)

Computes simulation envelopes of a summary function

spatstat::rlabel(X, ...)

Estimate the pair correlation function

spatstat::rshift(X, ...)

Evaluates expression involving function value objects

<https://spatstat.org>

Adrian Baddeley, Ege Rubak, Rolf Turner (2015).
Spatial Point Patterns: Methodology and Applications with R.
London: Chapman and Hall/CRC Press, 2015. URL