Package 'marklpp'

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Type Functions for marked point patterns on linear networks.

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Author c(person(``Mehdi", ``Moradi", email = ``m2.moradi@yahoo.com",
role = c(``aut", ``cre")),
person(``Matthias", ``Eckardt", role = ``aut"))

Maintainer Mehdi Moradi <m2.moradi@yahoo.com>

Description Functions for marked point patterns on linear networks.

Depends R (>= 4.2.0), spatstat.linnet

Imports stats

License GPL (>= 2)

Encoding UTF-8

LazyData true

RoxygenNote 7.2.3

R topics documented:

`markcorr.lpp` *Mark correlation function for point patterns over a linear network*

Description

Mark correlation function for point patterns over a linear network

Usage

```
markcorr.lpp(
  X,
  r = NULL,
  normalise = TRUE,
  f = function(m1, m2) {
```

```
    m1 * m2
 },
  ftype = c("corr", "vario", "rcorr", "schlather", "equ", "Beisbart"),
  method = c("density", "loess"),
  ...
)
```

Arguments

X	an object of class lpp
r	Optional. Numeric vector. The values of the argument r at which the mark correlation function should be evaluated.
normalise	If normalise=FALSE, compute only the numerator of the expression for the mark correlation.
f	Optional. Test function f used in the definition of the mark correlation function. An R function with at least two arguments. There is a sensible default.
ftype	type of test function used in argument f. Currently any selection of the options "corr","vario","rcorr","schlather","equ","Beisbart"
method	type of smoothing, either density or loess.

Value

a data.frame which gives the empirical mark correlation function and the distance vector r where the mark correlation finction is evaluated.

Author(s)

Mehdi Moradi <m2.moradi@yahoo.com> and Matthias Eckardt

References

Eckardt, M., and Moradi, M. (2024) Marked spatial point processes: current state and extensions to point processes on linear networks

Examples

```
X <- rpoislpp(10,simplenet)
marks(X) <- runif(npoints(X),10,11)
markcorr.lpp(X,r=r,ftype = "corr",f=function(m1,m2){m1*m2})
```

Index