pc.gevtail: The PC prior for ξ in the GEV likelihood

Parametrization

This is the PC prior for the tail (or shape) parameter ξ in the GEV likelihood, where the KLD is

$$KLD = \xi^2/(1-\xi)$$

for $0 \le \xi < 1$.

Specification

This prior for the hyperparameter is specified in the hyper-spesification, as

hyper = list(<theta> = list(prior="pc.gevtail", param=c(<lambda>, <low>, <high>))) restricted to the interval [low, high] (and the default interval is [0, 1/2]).

Example

Notes

OOPS: This prior can ONLY be used with family = "gev2" or "gp". If you use it with another family, then there is no error, you just get wrong results.

See also functions inla.pc.{d,p,q,r}gevtail which defines utility functions for this prior, without the interval-restriction.

This prior is experimental.