# pc.gevtail: The PC prior for $\xi$ in the GEV likelihood

#### Parametrization

This is the PC prior for the tail (or shape) parameter  $\xi$  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 = "bgev" 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.