

## 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

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

for  $0 \leq \xi < 1$ .

### Specification

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

```
hyper = list(<theta> = list(prior="pc.gevtail", param=c(<lambda>, <low>, <high>)))
```

restricted to the interval  $[\text{low}, \text{high}]$  (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.