

## The PC prior for $\theta = \pm \log(a)$ in the $\Gamma(1/a, 1/a)$ distribution with base model $a = 0$

### Parametrization

This is the PC prior for  $\theta = \pm \log(a)$  in the  $\Gamma(1/a, 1/a)$  distribution<sup>1</sup> distribution where  $a = 0$  is the base model.

### Specification

This prior for the hyperparameter is specified in the `hyper`-specification, for  $\theta = +\log(a)$  it is

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

and for  $\theta = -\log(a)$  it is

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

### Example

### Notes

See also functions `inla.pc.{d,p,q,r}gamma` which gives the same PC prior, but for  $\theta = a$  instead of  $\theta = \pm \log(a)$ .

**This function is experimental.**

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<sup>1</sup>Gamma distribution with mean 1 and variance  $a$ , or shape=  $1/a$  and rate=  $1/a$