

## PC prior for skewness in the Skew-normal

### Parametrization

This is the PC prior for the skewness parameter  $a$  in the Skew-normal

$$2\phi(x)\Phi(a^{1/3}x)$$

which is renormalized to have zero mean and unit variance. The base-model, is the standard normal.

The distance is proportional to  $a$  for  $|a|$  close to zero. The density, cumulative distribution function, quantile function, and a random number generator for this distribution are implemented in the `inla.pc.{d,p,q,r}sn` functions.

### Specification

This prior for the hyperparameters is specified inside the `hyper`-specification, as

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

### Example

#### Notes

See also functions `inla.pc.{d,p,q,r}prec` and `inla.doc("sn", section="link")`