# Linkmodel: sn

#### Parametrization

This is the link that map  $p \in (0,1)$  into  $x \in \Re$ , where

$$F_a(x) = p$$

and  $F_a$  is the cumulative distribution function for the skew-normal distribution,

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

which is renormalized to have zero mean and unit variance.

# Hyperparameters

The parameter a represented as

$$\theta = a$$

and the prior is defined on  $\theta$ . There is a PC prior available for a.

#### **Specification**

Use model="sn" within control.link.

# Hyperparameter spesification and default values

doc Skew-normal link

hyper

#### theta

hyperid 49031
name alpha
short.name alpha
initial 0
fixed TRUE
prior pc.sn
param 40
to.theta function(x) x
from.theta function(x) x

status experimental

pdf linksn

# Example

#### Notes

- The link-function is also available as R-functions inla.link.sn and inla.link.invsn
- This link-model is experimental for the moment.