Gaussian prior

Parametrisation

The normal/Gaussian distribution has density

$$\pi(\theta) = \left(\frac{\tau}{2\pi}\right)^{1/2} \exp\left(-\frac{\tau}{2}(\theta-\mu)^2\right) \tag{1}$$

for continuous θ where

μ**:** is the mean

τ**:** is precision.

Specification

The Gaussian prior for the hyperparameters is specified inside the `f()` function as following:

```
f( <whatever> , prior="normal", param=c(<mean>, <precision>) )
```

or

```
f( <whatever> , prior="gaussian", param=c(<mean>, <precision>) )
```

in the case where there is one hyperparameter for that particular `f`-model. In the case where we want to specify the prior for the hyperparameter of an observation model, for example the negative Binomial, the the prior spesification will appear inside the `control.data()`-argument; see the following example for illustration.

Example

In the following example we estimate the parameters in a simulated example with negative binomial responses and assign the hyperparameter θ (the dispersion parameter), a Gaussian prior with mean 0 and precision 0.01.

Notes

None.