

## Linear

### Parametrization

This model is just a simplified way of specifying a “fixed” effect

$$\eta_i = \beta w_i$$

where  $\beta$  is Normal with mean  $\mu$  and precision  $\tau$  (which are typically unequal to the default values; see `?control.fixed`).

### Hyperparameters

None

### Specification

```
f(w, model="linear", mean.linear = <mu>, prec.linear = <prec>)
```

where `<mu>` is the prior mean and `<prec>` is the prior precision.

### Hyperparameter specification and default values

hyper

`constr` FALSE

`nrow.ncol` FALSE

`augmented` FALSE

`aug.factor` 1

`aug.constr`

`n.div.by`

`n.required` FALSE

`set.default.values` FALSE

### Example

```
n = 100
w = runif(n)
y = 1 + w + rnorm(n)
r = inla(y ~ f(w, model = "linear",
              mean.linear=1, prec.linear=1),
        data = data.frame(y,w))
summary(r)
```

### Notes

None