

Estimate improper integral

Description

Estimate integral with Laplace approx.

Usage

```
laplace_estimate(type = 0, n, theta0, l.b, u.b, l, h, theta.density, like)
```

Arguments

<code>type</code>	Type of estimation. By default, function will estimate integrals of form $\exp(-N \cdot l)$. and wait $l(x)$ function as input. If <code>type = 1</code> , function will estimate integrals of form $h \cdot \text{theta.density} \cdot \text{like}$, where $h, \text{theta.density}, \text{like}$ are functions of x .
<code>n</code>	Constant N in integrand $\exp(-N \cdot l)$ or if <code>type = 1</code> number of observations.
<code>theta0</code>	Initial point to find modal value of $l(x)$, number or vector of numbers.
<code>l.b</code>	Low bound of set where to search modal value of $l(x)$, number or vector of numbers with $\text{dim} = \text{dim}(x)$
<code>u.b</code>	Upper bound of set where to search modal value of $l(x)$, number or vector of numbers with $\text{dim} = \text{dim}(x)$.
<code>l</code>	Function in integrand $\exp(-N \cdot l)$, function of x .
<code>h, theta.density, like</code>	Functions of x , if <code>type = 1</code> .

Value

Value of integral and modal point x .

Author(s)

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