Information on package "EM.mixSMSMN"

Description: EM-algorithms for fitting mixtures of SMSMN distributions

Package: EM.mixSMSMN

Type: Package

Version: 0.1.0

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License: GPL (>= 2.0)

Encoding: UTF-8

LazyData: true

Repository: GitHub

Needs Compilation: no

Built: R 4.0.4

UTC; windows

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Some examples :

```
# require(orthoDr)
# Example 1:
# Simulating 100 samples from one component SMSTN distribution:
y <- r.mixSMSMN(n=100, xi=list(c(0,5)), S=list(matrix(c(1,.4,.4,4),2,2)),
la=list(c(-2,3)), nu=list(c(5,3)), family="SMSTN.mix")
# n: the number of random samples
# EM output with specific initial values:
EM.mixSMSMN(y, xi=list(c(0,5)), S=list(matrix(c(1,.4,.4,4),2,2)),
la=list(c(-2,3)), nu=list(c(5,3)), family="SMSTN.mix", get.init=FALSE)
```

```
# EM output without specific initial values:
EM.mixSMSMN(y, family="SMSTN.mix", get.init=TRUE)

   # Example 2:
# Simulating 100 samples from mixtures of SMSTN distributions:
y <- r.mixSMSMN(n=200,w=c(.7,.3), xi=list(c(0,5),c(-10,15)),
S=list(matrix(c(1,.4,.4,4),2,2),diag(2)), la=list(c(-2,3),c(7,-5))
,
nu=list(c(3,10),c(15,5)), family="SMSTN.mix" )

   # EM output with specific initial values:
EM.mixSMSMN(y, M=2, w=c(.7,.3), xi=list(c(0,5),c(-10,15)),
S=list(matrix(c(1,.4,.4,4),2,2),diag(2)), la=list(c(-2,3),c(7,-5))
, nu=list(c(3,10),c(15,5)), family="SMSTN.mix", get.init=FALSE)
# EM output without specific initial values:
EM.mixSMSMN(y, M=2, family="SMSTN.mix")

   # Example 3:
# Simulating 100 samples from mixtures of SMSCN distributions:
y <- r.mixSMSMN(n=100,w=c(.7,.3), xi=list(c(0,5),c(-2,3)),
S=list(matrix(c(1,.4,.4,4),2,2),diag(2)), la=list(c(-2,3),c(7,-5))
, nu=list(list(c(.3,.1),c(.5,.7)),list(c(.7,.5),c(.1,.4))),
family="SMSCN.mix" )
# EM output without specific initial values:
EM.mixSMSMN(y, family="SMSCN.mix", get.init=TRUE)
```