

Package: nev (via r-universe)

June 6, 2026

Title Draw Nested Extreme Value Random Variables

Version 1.0.0.0

Description Draw nested extreme value random variables, which are the variables that appear in the latent variable formulation of the nested logit model.

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Imports fourierin (>= 0.2.5), pracma (>= 2.4.4), extraDistr (>= 1.10.0)

Repository <https://wilburtownsend.r-universe.dev>

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rnev	<i>Draw nested extreme value random variables</i>
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Description

rnev draws nested extreme value random variables.

Usage

```
rnev(
  N,
  sigma,
  nests,
  tol = 0.001,
  lower_int = NULL,
  upper_int = NULL,
  lower_eval = -10,
  upper_eval = NULL,
  resolution = 2^15
)
```

Arguments

N	the number of vectors;
sigma	the parameter that measures within-nest correlation, expressed either as a length-num_nests vector or as a scalar (in which case sigma is assumed constant across nests);
nests	a vector of positive integers, indicating the nest of each alternative;
tol	the tolerance on the requirement that the approximate pdf be real-valued, non-negative, and equal to zero at its boundary;
lower_int	an argument passed to <code>fourierin</code> (default depends on sigma);
upper_int	an argument passed to <code>fourierin</code> (default depends on sigma);
lower_eval	an argument passed to <code>fourierin</code> (default = -10);
upper_eval	an argument passed to <code>fourierin</code> (default depends on sigma);
resolution	an argument passed to <code>fourierin</code> (default = 2^{15}).

Value

An N-by-length(nests) matrix, with each row being a draw from the nested extreme value distribution.

Examples

```
rnev(10, 0.5, c(1,1,2,3))
```

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