sim2diss {smacof}   R Documentation
Converts similarites to dissimilarities

Description

Utility function for converting similarities into dissimilarities. Different methods are provided.

Usage

sim2diss(s, method = "corr", to.dist = FALSE)

Arguments

s
Similarity matrix (not necessarily symmetric, nor square)
method
Various methods for converting similarities into dissimilarities: "corr", "reverse", "reciprocal", "ranks", "exp", "Gaussian", "cooccurrence", "gravity", "confusion", "transition", "membership", "probability", or an integer value from which the similarity is subtracted
to.dist
If TRUE, object of class dist is produced
Details

The conversion formulas for the various methods can be found in the package vignette.

Value

Returns dissimilarities either as matrix or as dist object.

Examples

Convert crimes data (correlations)
data(crimes)
crimeD <- sim2diss(crimes, method = "corr", to.dist = TRUE)

Convert Wish data (similarities) by subtracting from 7
data(wish)
wishD <- sim2diss(wish, method = 7, to.dist = TRUE)

Convert Ekman data (similarities) into dissimilarities
data(ekman)
ekmanD <- sim2diss(ekman, method = "confusion", to.dist = TRUE)

Convert album ratings (rectangular similarities) by reversing the ratings
data(RockHard)
rockD1 <- sim2diss(RockHard[,5:18], method = "reverse")