

# Package ‘complexity’

April 15, 2017

**Type** Package

**Title** Calculate the Proportion of Permutations in Line with an Informative Hypothesis

**Version** 1.1.1

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**Description** Allows for the easy computation of complexity: the proportion of the parameter space in line with the hypothesis by chance. The package comes with a Shiny application in which the calculations can be conducted as well.

**License** GPL (>= 2)

**Depends** combinat, shiny

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

**Repository** CRAN

**Date/Publication** 2017-04-15 20:28:46 UTC

## R topics documented:

complexity . . . . . 1  
runShiny . . . . . 2

**Index** . . . . . 3

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complexity                      *Complexity*

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## Description

Calculates the complexity for the hypothesis of interest.

**Usage**

```
complexity(npar, ...)
```

**Arguments**

npar	a value indicating the number of parameters
...	an unlimited amount of pairs of parameter indicators that represent constraints, where the first parameter indicator is constrained to be lower than the second parameter indicator.

**Value**

A print of the following:

true permutations	a print of the permutations in line with the constraints
total number of permutations	the total number of permutations
number true	the number of true permutations
complexity (proportion)	the complexity, that is: the proportion of true permutations

**Examples**

```
complexity(4, 1, 2, 2, 3, 3, 4)
```

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runShiny	<i>function to launch Shiny application for complexity function</i>
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**Description**

Launches a Shiny application for the complexity function.

**Usage**

```
runShiny()
```

**Value**

A print of the following:

true permutations	a print of the permutations in line with the constraints
total number of permutations	the total number of permutations
number true	the number of true permutations
complexity (proportion)	the complexity, that is: the proportion of true permutations

# Index

\*Topic **htest**  
  complexity, 1  
  runShiny, 2

complexity, 1

runShiny, 2