

Package ‘SlicedLHD’

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Title Sliced Latin Hypercube Designs

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Depends R (>= 4.3.0)

Description A facility to generate sliced (orthogonal) Latin hypercube designs with four and five slices. For details about sliced and orthogonal Latin hypercube designs, see Yang, J. F., Lin, C. D., Qian, P. Z., and Lin, D. K. (2013). ``Construction of sliced orthogonal Latin hypercube designs". *Statistica Sinica*, 1117-1130, <doi:10.5705/ss.2012.037>.

Note This package is developed as part of ongoing Ph.D. (Agricultural Statistics) thesis research work of first author at ICAR-Indian Agricultural Statistics Research Institute, New Delhi, India.

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NeedsCompilation no

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slh *Sliced Latin hypercube designs*

Description

This function generates a sliced Latin hypercube designs

Usage

```
slh(n1, t, q)
```

Arguments

n1	number of runs in first slice
t	number of slices, currently 3 or 4 are supported
q	number of columns, between 2 to 6

Value

A sliced Latin hypercube design with q columns in $t(n1-1) + 1$ runs in t slices

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Examples

```
slh(5,3,4)
```

solh *Sliced orthogonal Latin hypercube designs*

Description

This function generates a sliced orthogonal Latin hypercube designs upto 6 columns

Usage

```
solh(n1, t, q)
```

Arguments

n1	number of runs in first slice
t	number of slices, currently 3 or 4 are supported
q	number of columns, between 2 to 6

solh

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Value

A sliced orthogonal Latin hypercube design with q columns in $t(n-1) + 1$ runs in t slices

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Examples

`solh(4,5,2)`

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