

# Package ‘Fstability’

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**Type** Package

**Title** Calculate Feature Stability

**Version** 0.1.2

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**Description** Has two functions to help with calculating feature selection stability. 'Lump' is a function that groups subset vectors into a dataframe, and adds NA to shorter vectors so they all have the same length.

'ASM' is a function that takes a dataframe of subset vectors and the original vector of features as inputs, and calculates the Stability of the feature selection.

The calculation for 'asm' uses the Adjusted Stability Measure proposed in: 'Lustgarten', 'Gopalakrishnan', & 'Visweswaran' (2009)<<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2815476/>>.

**Imports** stats

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**NeedsCompilation** no

**Repository** CRAN

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asm	<i>Adjusted Stability Measure</i>
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**Description**

Calculates feature stability using asm.

**Usage**

```
asm(x,y)
```

**Arguments**

x	A dataframe where each column is a subset.
y	A vector of the original set.

**Details**

This formula to calculate feature selection stability comes from:

Lustgarten, J. L., Gopalakrishnan, V., & Visweswaran, S. (2009). Measuring Stability of Feature Selection in Biomedical Datasets. *AMIA Annual Symposium Proceedings*, 2009, 406–410.

**Examples**

```
x<-c(1,2,3,4)
y<-c(3,4,5)
z<-c(2,3,4,5,6)
T<-lump(x,y,z)
A<-c(1,2,3,4,5,6,7)
asm(T,A)
```

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lump	<i>Lump Function</i>
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**Description**

Lumps vectors into a data frame. Adds NAs to make all the lengths the same.

**Usage**

```
lump(...)
```

**Arguments**

...	The subsets, given as vectors.
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**Examples**

```
x<-c(1,2,3,4)
y<-c(3,4,5)
z<-c(2,3,4,5,6)
lump(x,y,z)
```

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