

Package: expmAction (via r-universe)

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Type Package

Title Evaluates $v \exp(Q)$ for sparse matrix Q

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Description An efficient implementation of the uniformization algorithm is used to evaluate the matrix exponential action $v \exp(Q)$ for a positive vector v .

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Imports Rcpp (>= 0.12.3), Matrix

LinkingTo Rcpp, RcppArmadillo

Encoding UTF-8

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

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`cpp_v_exp_Q_t`*Evaluate matrix exponential action using uniformization*

Description

Evaluate matrix exponential action using uniformization

Usage

```
cpp_v_exp_Q_t(v, Q, t = 1, tolerance = 1e-12)
```

Arguments

<code>v</code>	A row vector
<code>Q</code>	a sparse rate matrix
<code>t</code>	Numeric time value, action evaluated is $v' \exp(Q \cdot t)$
<code>tolerance</code>	Maximum error of the numeric calculation

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