

**kexpmv: Matrix Exponential using Krylov Subspace Routines**

Implements functions from 'EXPOKIT' (<<https://www.maths.uq.edu.au/expokit/>>) to calculate matrix exponentials, Sidje RB, (1998) <[doi:10.1145/285861.285868](https://doi.org/10.1145/285861.285868)>. Includes functions for small dense matrices along with functions for large sparse matrices. The functions for large sparse matrices implement Krylov subspace methods which help minimise the computational complexity for matrix exponentials. 'Kexpmv' can be utilised to calculate both the matrix exponential in isolation along with the product of the matrix exponential and a vector.

Version: 0.0.3  
Depends: methods, [SparseM](#), R ( $\geq 3.0.2$ )  
LinkingTo: [Rcpp](#) ( $\geq 0.11.0$ )  
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License: [GPL-2](#) | [GPL-3](#) [expanded from: GPL ( $\geq 2$ )]  
Copyright: See kexpmv/inst/notes/LAPACK\_LICENSE.txt for src/lapack.f.  
NeedsCompilation: yes  
Materials: [README NEWS](#)  
CRAN checks: [kexpmv results](#)

**Downloads:**

Reference manual: [kexpmv.pdf](#)  
Package source: [kexpmv 0.0.3.tar.gz](#)  
Windows binaries: r-devel: [kexpmv 0.0.3.zip](#), r-release: [kexpmv 0.0.3.zip](#), r-oldrel: [kexpmv 0.0.3.zip](#)  
OS X binaries: r-release: [kexpmv 0.0.3.tgz](#), r-oldrel: [kexpmv 0.0.3.tgz](#)  
Old sources: [kexpmv archive](#)

**Linking:**

Please use the canonical form <https://CRAN.R-project.org/package=kexpmv> to link to this page.