

`sqrtm(M)`

user code

`is typeof(M) Hermitian Or
Symmetric{<:Real}?`

method
dispatcher

yes

no

specialized method

generic fallback
method

yes

Is M Hermitian or
real symmetric?

run time
check

no

compute `sqrtm(M)`
using diagonalization
(faster)

compute `sqrtm(M)`
using Schur factors
(faster)

actual
calculation