
Subject: Re: MATRIX LOGARITHM (and EXPONENTIAL)
Posted by [zhaobw1993](#) on Wed, 21 Oct 2015 23:04:15 GMT
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On Thursday, January 27, 2011 at 5:11:53 PM UTC-7, James wrote:

```
> On Jan 27, 4:10 pm, James <donje...@gmail.com> wrote:  
>>  
>> If the matrix A is diagonalizable, then:  
>>  
>> eigenvals = LA_EIGENPROBLEM(A, EIGENVECTORS=evecs)  
>> expA = evecs # diag_matrix(exp(eigenvals)) # invert(evecs)  
>> logA = evecs # diag_matrix(aexp(eigenvals)) # invert(evecs)  
>  
> sorry, replace INVERT with LA_INVERT to account for complex  
> eigenvectors.
```

Does logA need to be transposed?

My way was,

```
evecs = transpose(evecs)
```

```
logA = evecs ## diag_matrix(eigenvalues) ## invert(evecs)
```

result of this way seems to be transpose of result of your way.

Thanks
