Subject: Re: MATRIX LOGARITHM (and EXPONENTIAL)
Posted by chris_torrence@NOSPAM on Fri, 23 Oct 2015 17:52:57 GMT
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On Wednesday, October 21, 2015 at 5:04:18 PM UTC-6, zhaob...@gmail.com wrote:
> 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(alog(eigenvals)) # invert(evecs)
>>
>> sorry, replace INVERT with LA_INVERT to account for complex
>> eigenvectors.
>
> Does logA need to be transposed?
> My way was,
> evens = transpose(evens)
> logA = evecs ## diag_matrix(eigenvalues) ## invert(evecs)
> result of this way seems to be transpose of result of your way.
>
> Thanks

Or, you could use the Python bridge:

```
la = Python.Import('scipy.linalg')
expm = la.expm(A)
logm = la.logm(A)
```

-Chris