

---

Subject: Re: matrix log and exp

Posted by [hradilv.nospam](#) on Wed, 17 Apr 2002 21:34:03 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

On Wed, 17 Apr 2002 15:32:42 -0400, Paul Van Delst  
<paul.vandelst@noaa.gov> wrote:

> G Karas wrote:

>>

>> Hi group,

>> one quickie and possibly difficult:

>>

>> IDL does not have a matrix logarithm logm and matrix  
>> exponent expm function. I was thinking of calling lapack  
>> routines which do it, but have no experience with lapack  
>> or FORTRAN. Anyone with any tips on this one?

>

> Yes. Use ALOG() and EXP().

>

> paulv

>

> --

> Paul van Delst            Religious and cultural

> CIMSS @ NOAA/NCEP        purity is a fundamentalist

> Ph: (301)763-8000 x7274    fantasy

> Fax:(301)763-8545         V.S.Naipaul

I think what the original post-er is looking for is:

$\exp(A) = \text{SUM}\{ (1/n!) * A^n \}$  from 0 to infinity

The only (other) advice I can give is to truncate the sum at some  
"reasonable" value (10?, 100?). 'couse you still have to deal with  
the  $A^n$  part %^{

---