Subject: Re: Exponential of very small numbers
Posted by wlandsman on Wed, 08 May 2013 16:42:25 GMT
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For x very close to zero I would use the approximation
exp(x) = x

or you could display all the digits (and use double precision)

```
IDL> print,EXP(1.6671699d-013)-1
   1.6675550e-13
IDL> print,EXP(1.6671699d-013),f='(f24.18)'
    1.000000000000166755
```

--Wayne

On Wednesday, May 8, 2013 12:14:19 PM UTC-4, Jacopo D wrote:
> Hello, first post ;)
>
> i need to integrate the planck distribution on IDL, but i have a problem with the exponential.
>
> The error is:
>
> EXP(1.6671699e-013)=1
>
>
>
> What can i do to avoid this problem? Even if it's an exponent very close to zero, it's important for my code.
>
> Thanks!

Subject: Re: Exponential of very small numbers
Posted by Jacopo D on Wed, 08 May 2013 17:40:54 GMT
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Thank you Wayne, it works!!