Subject: Re: IDL is not accurate enough!
Posted by pgrigis on Thu, 11 Sep 2008 14:35:27 GMT
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noahh.schwa...@gmail.com wrote:

>> On Thu, 28 Aug 2008, noahh.schwa...@gmail.com wrote:
>>> Hi,
>>
>>> I've been having problems with IDL accuracy. I'm trying to perform
>>> calculations using the gamma function. The problem is that it grows
>>> VERY fast! Performing this calculation in double (namely gamma(x)/
>>> gamma(y) with x and y big) yields the result: NaN...
>>> Would it be possible to use a program like 'Mathematica' (or any
>>> other) and to plug it in my ILD program? Some kind of CALL_EXTERNAL
>>> that is to say. If it is possible, how can I do it and what is the
>>> best program to use?
>>
>>> Thanks,
>>> Noah
>>
>> gamma(x)/gamma(y) => exp(lngamma(x)-lngamma(y))
>>
>> regards,
>> lajos
>
>
> lngamma works fine for my propose! Would you know if an equivalent
> function exists for the beselk function? Something like lnbeselk?
> beselk(x) for x>709 doesn't seen to work.

Isn't 0 a good enough approximation?

Paolo

> If not, I guess that I'll have to wait for the DLMs that add arbitrary
> precision floating point...
>
> cheers,
> Noah