
Subject: Re: IDL is not accurate enough!

Posted by [noahh.schwartz](#) on Thu, 11 Sep 2008 14:10:41 GMT

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On 28 août, 18:42, FÖLDY Lajos <fo...@rmki.kfki.hu> 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 IDL 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 seem to work.

If not, I guess that I'll have to wait for the DLMS that add arbitrary
precision floating point...

cheers,

Noah
