Subject: Re: Hypergeometric functions
Posted by Craig Markwardt on Tue, 30 Oct 2001 03:47:29 GMT
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Ralf Flicker <rflicker@gemini.edu> writes:

> Does anybody know of an available IDL implementation for
> generalized hypergeometric functions ? I need in particular
> 2F3(a,b;c,d,e;z^2), which is absolutely convergent for all real
> z. I can't seem to find anything among the standard sources, but
> thought I'd check here before I start coding it myself.

Hi Ralf--

I see you haven't gotten a response to this question for the past several days. I think the answer is that IDL is pretty weak on special functions, although it does have a few.

However, the particular hypergeometric function you are seeking is rather esoteric. I cannot find it in the GNU scientific library, nor in CEPHES. These are two C libraries of special functions. [Nor, for that matter, can I find it cursorily in Abramowitz & Stegun.] It looks like you will have to code this yourself.

If it's really convergent then it should be rather simple to code the series directly.

Craig

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