Subject: Bessel Functions and Numerical Recipes
Posted by Brian Keating on Mon, 26 Feb 2001 21:46:03 GMT
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Anyone have a robust algorithm to compute ordinary
Bessel Functions of integer order, greater than order ~ 19
(where IDL 5.4 currently cuts off).

Another question:

Has anyone converted a substantial portion of
Numerical Recipes [e.g., Fortran], to IDL? Are there public libraries for
this sort of thing? Numerical Recipes algorithms seem much more
stable/reliable than those in IDL and I have the complete Fortran code for
most Numerical Recipes but find it tedious to manually convert between
languages each time I want a program.

Thanks!

-Brian

Thanks,

-Brian

Subject: Re: Bessel Functions and Numerical Recipes
Posted by Christopher W. O'Dell on Thu, 01 Mar 2001 17:25:00 GMT
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Brian Keating wrote:

> Anyone have a robust algorithm to compute ordinary
> Bessel Functions of integer order, greater than order ~ 19
> (where IDL 5.4 currently cuts off).
>

I don't think it exists yet. Mati Meron wrote what looks to be a good routine
for K-Bessel functions of arbitrary order, but not a BeselJ replacement.

Chris

Subject: Re: Bessel Functions and Numerical Recipes
Posted by Michael Asten on Fri, 02 Mar 2001 01:45:52 GMT
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Brian Keating wrote:

> Anyone have a robust algorithm to compute ordinary
> Bessel Functions of integer order, greater than order ~ 19
> (where IDL 5.4 currently cuts off).

You might try the website below; I have had some success in free translation from the fortran original to idl, for a couple of the routines (but not yours), without need to restructure the code.

Regards,
Michael Asten

;
; website http://iris-lee3.ece.uiuc.edu/~jjin/routines/routines.html
; Jianming Jin, Associate Professor
; Department of Electrical and Computer Engineering
; University of Illinois at Urbana-Champaign

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