Subject: Re: LSODE implemantation
Posted by Craig Markwardt on Sun, 10 Aug 2003 16:54:11 GMT
View Forum Message <> Reply to Message

"Theo Brauers" <th.brauers@NOSPAM.fz-juelich.de.NOSPAM> writes:

> Hi.
>
> A long time ago there was a discussion about the quality of the
> implementation of LSODE in IDL. I intend to use LSODE
> in the near future and I'm interested in any report about the
> bugs and the goodies in that routine. Alternatvely I could
> use LSODE (fortran) or CVODE (C) as an external routine.
> Are there ready to use dll s or dlm s and the respective
> ILD pro files?

Sorry for responding so late to this question. It "scrolled" too far.

I have an ODE solver on my web page named DDEABM. It is a variable order Adams Bashford Moulton solver (predictor corrector) with error control. I've used it quite a bit for several problems; and I recently had a report of someone using it to successfully solve 65,000 simultaneous equations! DDEABM (and Runge Kutta for that matter) is really only appropriate for non-"stiff" sets of equations.

Good luck,
Craig

http://cow.physics.wisc.edu/~craigm/idl/idl.html (under math)

--
---------- ----------
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
---------- ----------