Subject: Differential equations solver in IDL 4.0 Posted by ob10001 on Tue, 21 Nov 1995 08:00:00 GMT

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Dear all,

I have recently come back to some routines for solving ordinary differential equations that were written in IDL 3.6. A typical statement read like:

diffEQ_45, "WKB",[amplnull,zgeomnull,omeganull,kwavenull,mwavenull],\$ tnull,tfinal,times,vars,PARAMS=[fcor,Nbv],TOL=1e-6

The procedure diffEQ_45 is now no longer supported (although still accessible, I think), nor documented.

But the only procedure `replacing' diffEQ_45 in IDL 4.0 is RK4, which has no error tolerance keyword, no automatic step-size control, and apparently is also not capable of passing parameters to the function evaluating the derivatives!

So my question is whether there is a proper replacement of diffEQ_45 in IDL 4.0 that I have simply overlooked.

Regards, Oliver.	
oliver buhler odepartment of applied mathematics and university of cambridge, england	bb10001@damtp.cam.ac.uk theoretical physics
oliver buhler of department of applied mathematics and university of cambridge, england	bb10001@damtp.cam.ac.uk theoretical physics day-time phone +44 1223 337866