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.

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