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Subject: vectorized RK4

Posted by [news.qwest.net](http://news.qwest.net) on Thu, 09 Nov 2006 17:17:20 GMT

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I'm looking at a problem where we have to calculate a Runge Kutta solution for a number of particles.

From some reading I did, I thought I could vectorize the RK4 call over the number of particles.

From the help example, we have the following call,  
> RK4(Y, allders, X, H, 'differential',/double)

For a single particle

x = 0.0

y = [4.0,6.0]

allders is a 2 element array

H = 0.5

"differential" is a defined function returns a 2 element array.

So, how does one go about vectorizing this for 1000 particles?

Is that possible?

I cannot just pass in vectors for x and y

(and of course have the appropriate differential function)

Cheers,

bob

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