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Subject: better atan function?

Posted by [R](#) on Tue, 30 May 2000 07:00:00 GMT

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Greetings all,

I have found that the phase I get from the FFT has a precision of only  $\sim 10^{-8}$ , and that the precision depends on what value phase has.

I think I've traced this to the atan function, or perhaps the division that takes place in the atan function.

Does anyone have a better atan function (more precise)?

Or is this merely the way it is when one is bumping up against precision errors?

By comparison, my "simulation" does get the amplitudes of the spectral components to a precision of  $\sim 10^{-14}$  or so. (as expected for double precision variables, and no noise)

cheers,  
bob  
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