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Subject: Re: IDL FFT (spec -> interferogram)

Posted by [Robert Stockwell](#) on Mon, 08 Apr 2002 17:34:45 GMT

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Paul van Delst wrote:

> But one doesn't always want the power spectrum. Usually (in my field at least) one wants the  
> complex valued spectrum where the imaginary component is known and happily zero. (Don't  
know if  
> Randall wants that tho')

> paulv

isn't that the same thing? ( real eq complex with imag=0)

If the interferogram is indeed the autocorrelation function,  
then the power spectrum is all you have, you cannot deduce  
any phase info.

Having said that, it is conceivable that one can create a  
complex interferogram (for instance, combining two different  
channels etc), but in the "usual" (i.e. that I am familiar with),  
an interferogram is an scalar autocorrelation function.

Cheers,  
bob

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