Subject: Re: Reverse FFT ?
Posted by Richard Tyc on Wed, 09 Aug 2000 07:00:00 GMT
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Thanks Jonas,

I do retain the phase and magnitude image (from which I can find the Real and Imaginary Data).

So, from Craig's reply, I should be able to find "k" space by doing a reverse FFT on the Real/Imaginary image date right ?
Would the real part of this reverse FFT solution be true k space ? ie. setting the second term to a negative number
Also, would I have to do a 1D FFT Row by Row on my data or can it be done as a 2D FFT.

Rich

Jonas <jonas_2@hotmail.com> wrote in message news:8mrhpqhkk1@news.lth.se...
> Hi Rich
>
> If the image data you have is not complex, then it is not possible to
> retrieve the correct k-space data by doing an FFT. A reconstructed MR image
> is always in complex form (to be represented by a mgnitude and a phase
> angle, or by a real and an imaginary number), but the image shown on the
> screen is the magnitude of each complex number. If you only have the
> magnitude data, you have "thrown away" some important information, and will
> not be able to get a correct k-space. k-space is by definition filled with
> complex data.
>
> Furthermore, if I remember my MR physics correct, you are supposed to do a
> forward transform when going from image space to k-space, but I am not
> sure...
>
>
> However, if you just want to have a look at a "general k-space", you might
> take a look at the magnitude of a FFT of a magnitude image... don't forget
> to shift the transformed data so that the lowest frequency is centered in
> the image....
>
> regards
> Jonas
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