Subject: Re: FFT OF A NON RECTANGULAR IMAGE
Posted by Kenneth P. Bowman on Tue, 28 Oct 2008 18:12:08 GMT
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In article
<4a2c3474-def0-48fc-8611-05635d75f05d@v39g2000pro.googlegroups.com>,
 legall_alice@yahoo.fr wrote:

> Hi all:
>
> How can we do a FFT on a 2D-function that defines a non-rectangular
> image?
>
> Here is an example: the region of interest is an inclined ellipse. To
> be able to apply FFT(array,1), I created an array where all the pixels
> around the ellipse are set to the value zero. I would like to exclude
> from the FFT process the black area (zero value pixels) surrounding
> the ellipse.
>
>
> Thank you a lot in advance for your help,
>
> Alice Le Gall

By their nature, Fourier transforms are global.

Can you map the ellipse to a rectangle? (http://en.wikipedia.org/wiki/Conformal_map)

Ken Bowman