
Subject: Re: FFT phase?

Posted by [xqinshan](#) on Fri, 25 Jan 2013 06:49:00 GMT

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Thanks. I have known the reason. What I use is like $x = 2 * \text{dindgen}(25) / 16$, so the amplitude and phase are not so accurate.

> On Thursday, January 24, 2013 12:28:02 PM UTC-5, xqin...@gmail.com wrote:

>

>> Hi,

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>> just use `FFT(y)`. For example, $y = A * \cos(x + B)$, $C = \text{fft}(y)$. I think `atan(C./phase)` should equal to B, but the return result is not. How to obtain A and B from complex C?

>

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> It is correct. Example:

>

> `x = 2 * !dpi * 2 * dindgen(16) / 16 ; ; Angle in radians`

>

> `y = 0.7 * cos(x + 1.6000)`

>

> `c = fft(y,-1)`

>

> `print, atan(c[2],/phase)`

>

> `==> 1.6000`

>

>

>

> Craig
