
Subject: Re: FFT phase?

Posted by [Craig Markwardt](#) on Fri, 25 Jan 2013 02:11:30 GMT

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

> Hi,

>

>

>

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

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
