Subject: FIT_ELLIPSE
Posted by samsammurphy on Tue, 07 Apr 2015 19:18:12 GMT
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Hello,

The FIT_ELLIPSE program has been really useful for me!

I was wondering how to reference the technique used to calculate the major and minor axes?

The use of a 'mass distribution tensor' instead of the covariance of the data points seems novel to me (and computationally more efficient).

Many thanks,

Sam

Subject: Re: FIT_ELLIPSE
Posted by David Fanning on Wed, 08 Apr 2015 02:18:10 GMT
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samsammurphy@gmail.com writes:

> The FIT_ELLIPSE program has been really useful for me!
>
> I was wondering how to reference the technique used to calculate the major and minor axes?
>
> The use of a 'mass distribution tensor' instead of the covariance of the data points seems novel to me (and computationally more efficient).

Craig Markwardt did all the magic. I just carried his bags.

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: FIT_ELLIPSE
Posted by Craig Markwardt on Wed, 08 Apr 2015 23:09:43 GMT
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On Tuesday, April 7, 2015 at 3:18:15 PM UTC-4, Sam Murphy wrote:
> Hello,
>
> The FIT_ELLIPSE program has been really useful for me!
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> I was wondering how to reference the technique used to calculate the major and minor axes?
>
> The use of a 'mass distribution tensor' instead of the covariance of the data points seems novel to me (and computationally more efficient).

"Mass distribution tensor" is basically the same as the moments of the distribution, which is related to the covariance matrix. There's no magic here.

Craig
