Subject: Re: Image analysis and ring identification
Posted by David Fanning on Wed, 17 Apr 2002 14:29:15 GMT
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Rachel Pepper (Rachel_Pepper@brown.edu) writes:

> I am a fairly new IDL user trying to use image analysis to determine
> particle positions in my images. After filtering the images, they
> appear to be bright rings around a dark center. I was wondering if
> anyone knew a routine to fit these sorts of images to a circle so that
> the center of the ring could be determined. Thanks for any help!

If you can isolate the "blobs" (as we usually call them) in
your image (e.g., with Label_Region or with something home-grown)
and obtain the indices of the pixels in the blob, then you can
calculate the centroid of the pixel distribution in the manner
described on this page:

http://www.dfanning.com/tips/centroid.html

Craig Markwardt wrote me a nifty little routine one time
to then fit an ellipse to the pixel distribution in an
attempt to characterize the size, shape, and orientation
of the blobs. I keep meaning to make this algorithm available,
but I haven't gotten around to it yet. (And I don't really
what to cut into Craig's significant income as the Expert's
Expert, if you know what I mean.)

Cheers,

David

P.S. By the way, Craig. I put that check in the mail to
you today. Really! :-)

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