

---

Subject: Re: Image analysis and ring identification  
Posted by [Rachel Pepper](#) on Thu, 18 Apr 2002 04:21:46 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Actually, the rings often have a bright spot that is not in the center of the ring, so I don't think the centroiding technique will work. Do you have any other suggestions?

Thanks,  
Rachel

David Fanning wrote:

> 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! :-)  
>  
> --  
> David W. Fanning, Ph.D.  
> Fanning Software Consulting  
> Phone: 970-221-0438, E-mail: [david@dfanning.com](mailto:david@dfanning.com)

- > Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
  - > Toll-Free IDL Book Orders: 1-888-461-0155
-