
Subject: Re: Minimum area ellipse - quadratic optimisation?

Posted by [Olivia](#) on Fri, 17 Feb 2006 17:28:27 GMT

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>> I posted on this topic before, but it is important that my ellipse
>> fitting method does not rely on convex hulls.

> Is there a special reason for this?

There is a special reason. I am doing a project on galaxy cluster shapes, comparing the shapes of the clusters as determined by voronoi tessellations, and by the minimum area ellipses. So fitting ellipses to convex hulls would give a false comparison.

> Perhaps

> http://geometryalgorithms.com/Archive/algorithm_0107/algorithm_0107.htm

> could be of some help

This looks like just the thing I am after. I don't think finding the center point and then finding the minimum area ellipse is a valid method, after experimenting with it today. I understand the idea of this fitting algorithm, but after reading the paper by Gaertner and Schoenherr I doubt if I would be able to right a program to fit the ellipses myself. Do you know of anyone who might have written one of these types of programs for IDL? Thanks very much for your idea, and help.

Olivia
