
Subject: Re: How to detect ellipse intersection
Posted by [pgrigis](#) on Fri, 07 May 2010 14:10:42 GMT
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On May 7, 4:53 am, oupin <hhb1...@gmail.com> wrote:

- > I have hundreds and thousands ellipse, which includes center
- > coordinates and major/minor axis and azimuth of major axis. Now I want
- > to detect which pairs ellipse intersect, how can I realize this
- > program using IDL?

first, select pairs that could possible have an intersection
(i.e. distance between centers less or equal the larger of the
two semimajor axes) - no point in bothering with far apart pairs.

second, find the intersection points. I guess they are given by
a 4th degree equation (since each ellipse is 2nd degree, and there
can obviously be from 0 to 4 intersections), so you should be
able to solve it exactly... but some smart geometer may have a better
approach :)

Ciao,
Paolo
