Subject: Re: find a plane in a 3D plot
Posted by pgrigis on Fri, 12 Sep 2008 13:45:10 GMT
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If a field line is embedded in a plane, then the vector product
of any two vectors tangent to it will point in the direction of
the perpendicular of the plane. If not, the vector products will
not be parallel.

Paolo

Nicola wrote:
> Dear folks,
> I'm facing a problem which I do not have any idea how to solve.
> Imagine that you have a 3 dimensional field as a function of time, say
> the three component of a magnetic field for example. They are stored
> in a fltarr(nsample,3).
> If plotted in a 3D box (by using for example plot_3dbox) they describe
> a closed orbit. I do know that they actually describe an ellipse (or
> something similar considering the fact that we are dealing with
> experimental data which not always correspond to theory!) and that
> this ellipse (or closed path) lies on a plane which have a certain
> inclination with respect to the three magnetic axis. I have to find a
> way to identify this plane and the direction perpendicular to this
> plane in the more accurate way as possible.
> Do you have any idea how to proceed? Any suggestion will be very very
> appreciated
> Thank you very much
> nicola