Subject: Re: How to find out the best fitted function ?
Posted by b_gom on Thu, 17 Jul 2003 23:16:54 GMT
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see http://curveexpert.webhop.biz/

dinhnq@yahoo.com (Dinh Huong) wrote in message
news:<b5f3d715.0307170152.2338aae7@posting.google.com>...
> Hi lists,
>
> How to find out the best fitted function to data before determine the
> best fitted parameters? Is there any routine in IDL or other programs
> can pick out the best fitted function directly instead of previous
> inputting? Since for most cases the parameters are rather easy to
> determine as long as the suitable function types are known.
> Thank for help in advance,
> Nguyen

Subject: Re: How to find out the best fitted function ?
Posted by robert.dimeo on Fri, 18 Jul 2003 12:25:56 GMT
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dinhnq@yahoo.com (Dinh Huong) wrote in message
news:<b5f3d715.0307170152.2338aae7@posting.google.com>...
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If I understand your question correctly you are asking for a solution to a tough problem, i.e. determining the best model that fits your data. Yes, there are very reliable algorithms for refining a particular model by varying the parameters (see the MPFIT routines by Craig Markwardt for instance or LMFIT or CURVEFIT in the IDL distribution). However determination of the best model is not so easy unless you are happy making a simple comparison of chi-squared. In some cases that might be appropriate but in many other cases it is not. You might want to look into using Bayesian techniques for model selection. There is a nice introductory book that can help get you started called "Data Analysis: A Bayesian Tutorial" by Devinder Sivia

from Oxford Science Publications, 1996.

Sorry but I don't know of a simple answer to this one.

Hope this helps.

Rob
