Subject: Re: Fitting an implicit function with IDL
Posted by Heinz Stege on Tue, 08 Jun 2010 22:29:10 GMT
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On Tue, 8 Jun 2010 03:54:18 -0700 (PDT), Gianluca Li Causi wrote:

> Hi all,
> I have to find the A, B and C parameters which best satisfy (in the
> chi-square sense) the following equation:
>
> A * g(x) + (W(x) + B) / (X(x) + C) = 0
>
> where g(x) is a known function of x and (W +/- sigmaW) and (Z +/-
> sigmaZ) are two sets of measured data together with their measurement
> errors.
>
> This is different from the usual form F(x, A,B,C) = Y where a function
> of x and parameters is to be fitted to a dataset (Y +/- sigma_Y).
> So, how to use the various IDL fitting routines to solve this
> problem??
>
I think, your equation is not really different from the form
y=f(x,A,B,C). In your case it is y=0. You can use the IDL fitting
routines by using an array y=fltarr(n_elements(x)). Possibly CURVEFIT
is your friend.

Greetings, Heinz