
Subject: Re: Newbie's question

Posted by [JD Smith](#) on Fri, 21 Oct 2005 00:07:18 GMT

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On Thu, 20 Oct 2005 13:18:52 -0700, ChiChiRuiz@gmail.com wrote:

> Poly_fit doesn't really give me what I need. I don't need the
> coefficients of a quadratic equation, I want to know the best fit of the
> scatter plot to some power of x. I know it's not exactly power square,
> but it should be in that neighborhood. Even if I shift all data to the
> positive axis, i.e. $y = a * (x - x_0)^b$, any x values less than x_0 is still
> considered "negative". I don't know what else...maybe I'll try change of
> variable or something... thank you for your help.

Fitting to a single power law is a time honored tradition in many of the precision-limited fields of physics (e.g. astronomy). The typical approach is to fit a straight line to the log/log representation of the data. The slope of the line is the exponent b. If your data have negative values by artificial choice (e.g. time offset, etc.) simply shift that choice to make them positive.

JD
