
Subject: Re: Fitting a Gaussian to an "unleveled" histogram: Interpreting the width
Posted by [Maryam](#) on Fri, 27 Feb 2015 20:25:22 GMT

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Hello Craig,

Thanks for your reply. It is actually not an absorption line in a spectrum that I am trying to fit the Gaussian to. It is just the distribution of asteroids in the asteroid belt. I am trying to measure the width of the gap caused by the planet's (Jupiter's) gravitational perturbation; and the gap has somewhat of a Gaussian-looking shape, except that it is higher at one end than the other. IDL's `mpfitfun` fits it nicely but I want to know how it determines the amplitude. I tried normalizing the histogram once to the lower end and once to the higher end and then made the fit to see which amplitude it is that IDL is using, but it is neither one of those! The fit works, it is just the interpretation of the parameters that I am confused about!

Maryam
