Subject: Re: maximum likelihood fitting with prior
Posted by Craig Markwardt on Mon, 15 Apr 2013 20:19:41 GMT
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On Monday, April 15, 2013 9:48:10 AM UTC-4, rrya...@gmail.com wrote:
> Err, I guess I want maximum posterior fitting. I have some data to which I want to fit a very complex and highly non-linear model, but I have some priors on the parameters of the model. I used to have no priors (err, I guess flat priors) and in which case the problem was a simple "chi-2", and I was successfully using C. Markwardt's mpfit. It worked mostly great, but I had to do some experimentation to ensure I was avoiding local extrema. However, with the prior I cannot write a function that returns an array of the form:

What is the nature of the prior information? If it's simply that you have an a priori parameter value with a priori (gaussian) uncertainty, then that's easy. If you have a covariance matrix, or non-gaussian prior distribution, well then it gets harder.

Craig