Subject: Reducing a set of curves to a mean curve

Posted by Bernhard Reinhardt on Mon, 04 Jan 2010 15:59:10 GMT

Hi everyone,

I have a set of curves (as x-y-points) which I'd like to reduce to a
mean curve and some kind of deviation interval. If the curves would
consist of fixed x-values with varying y-values this would be no big
deal since I could compute the mean and a deviation measure at every
x-value. However it turns out that the x-values are not fixed as well.

My first idea was to use poly_fit but the results don't look like I want
them to and it doesn't solve my problem with the deviation interval.
Right now I'm thinking of using a fixed x-grid and interpolating the
data. But before I reinvent the wheel again I want to ask if someone
here has appropriate code in his library. I think this should be a
common problem!?

Best regrads!

Bernhard