

More Curve Fitting to a Gaussian

The Quick Fit menu provides easy access to curve fitting using the built-in fit functions, with a limited set of options, to fit data displayed in a graph. You may want more options. For that you must use the Curve Fitting dialog.

1. **Choose the Analysis→Curve Fitting menu item.**

The Curve Fitting dialog appears.

2. **Click the Function and Data tab.**
3. **From the Function pop-up menu, choose gauss.**
4. **From the Y Data pop-up menu, choose fakeY.**
5. **From the X Data pop-up menu, choose fakeX.**
6. **Click the Data Options tab.**

The Weighting and Data Mask pop-up menus should read “_none_”.

7. **Click the Output Options tab.**

The Destination pop-up menu should read “_auto_” and Residual should read “_none_”.

8. **Click Do It.**

During the fit a Curve Fit progress window appears. After a few passes the fit is finished and Igor waits for you to click OK in the progress window.

9. **Click OK.**

The curve fit results are printed in the history. They are the same as in the previous section.

Sorting

In the next section we will do a curve fit to a subrange of the data. For this to work, the data must be sorted by X values.

1. **Double-click one of the open circle markers in the graph.**

The Modify Traces Appearance dialog appears with fakeY selected. If fakeY is not selected, click it.

2. **From the Mode pop-up choose Lines between points and click Do It.**

The fakeY trace reverts to a rat's nest of lines.

3. **Choose the Analysis→Sort menu item.**

The Sorting dialog appears.

4. **If necessary choose Sort from the Operation pop-up menu.**
5. **Select “fakeX” in the Key Wave list and both “fakeX” and “fakeY” in the Waves to Sort list.**
6. **Uncheck any checkboxes in the dialog that are checked, including the Display Output In checkbox.**
7. **Click Do It.**

The rat's nest is untangled. Since we were using the lines between points mode just to show the results of the sort, we now switch back to open circles.

8. **Press Control and click (Macintosh) or right-click (Windows) on the fakeY trace (the jagged one).**
9. **Choose Markers from the Mode submenu.**

A pop-up menu appears with the name of the trace at the top. If it is not “Browse fakeY” try again.