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.**

    This will sort both fakeX and fakeY using fakeX as the sort key.

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).**

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

9.   **Choose Markers from the Mode submenu.**