Another technique is to use Igor's drawing tools to create fake axes. For an example, choose File→Example Experiments→Graphing Techniques→New Polar Graph Demo or File→Example Experiments→Graphing Techniques→Ternary Diagram Demo.

Axis Labels

The text for an axis label in a graph can come from one of two places. If you specify units for the wave which controls an axis, using the Change Wave Scaling dialog, Igor uses these units to label the axis. You can override this labeling by explicitly entering axis label text using the Axis Label tab of the Modify Axis dialog.

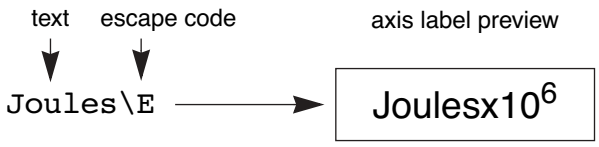
To display the dialog, choose Graph→Label Axis or double-click an axis label. Select the axis that you want to label from the Axis pop-up menu and then enter the text for the axis label in the Axis Label area. Further label formatting options are available in the **Label Options Tab**.

There are two parts to an axis label: the text for the label and the special effects such as font, font size, superscript or subscript. You specify the text by typing in the Axis Label area. At any point in entering the text, you can choose a special effect from a pop-up menu in the Insert area.

The Label Preview area shows what the axis label will look like, taking the text and special effects into account. You can not enter text in the preview. You can also see your label on the graph if you check the Live Update checkbox.

Axis Label Escape Codes

When you choose a special effect, Igor inserts an **escape code** in the text. An escape code consists of a backslash character followed by one or more characters. It represents the special effect you chose. The escape codes are cryptic but you can see their effects in the Label Preview box.



You can insert special affects at any point in the text by clicking at that point and choosing the special effect from the Insert pop-ups.

Choosing an item from the Font pop-up menu inserts a code that changes the font for subsequent characters in the label. The font pop-up also has a "Recall font" item. This item is used to make elaborate axis labels. See **Elaborate Annotations** on page III-51.

Choosing an item from the Font Size pop-up menu inserts a code that changes the font size for subsequent characters in the label. The font size pop-up also has a "Recall size" item used to make elaborate axis labels.

Axis Label Special Effects

The **Special** pop-up menu includes items for controlling many features including superscript, subscript, justification, and text color, as well as items for inserting special characters, markers and pictures.

The Store Info, Recall Info, Recall X Position, and Recall Y Position items are used to create elaborate annotations. See **Elaborate Annotations** on page III-51.

The most commonly used items are Superscript, Subscript and Normal. To create a superscript or subscript, use the Special pop-up menu to insert the desired code, type the text of the superscript or subscript and then finish with the Normal code. For example, suppose you want to create an axis label that reads "Phase space density (s^3m^{-6})". To do this, type "Phase space density (s", choose the Superscript item from the Special pop-up menu, type "3", choose Normal, type "m", choose Superscript, type "-6", choose Normal and then type ")". See Chapter III-2, **Annotations**, for a complete discussion of these items.

The "Wave controlling axis" item inserts a code that prints the name of the first wave plotted on the given axis.

The Trace Symbol submenu inserts a code that draws the symbol used to plot the selected trace.