

#### See Also

The **Tag** operation, the **TagWaveRef** function.

For a discussion of wave references, see **Wave Reference Functions** on page IV-197.

## TagWaveRef

### TagWaveRef ( )

TagWaveRef is a very specialized function that is only valid when called from within the text of a tag as part of a \{ } dynamic text escape sequence. It returns a wave reference to the wave that the tag is on and helps you to display information about the tagged wave. It is often used in conjunction with the **TagVal** function. You can pass the result of TagWaveRef to any function that takes a Wave parameter.

### Examples

Show the name of the data folder containing the tagged wave:

```
Tag wave0, 0, "\\ON is in \\{\\\"%s\\\", GetWavesDataFolder (TagWaveRef ( ), 0) }"
```

### See Also

The **Tag** operation, the **TagVal** function

For a discussion of wave references, see **Wave Reference Functions** on page IV-197.

## tan

### tan (angle)

The tan function returns the tangent of *angle* which is in radians.

In complex expressions, *angle* is complex, and tan(*angle*) returns a complex value:

$$\tan(x + iy) = \frac{\sin(x + iy)}{\cos(x + iy)} = \frac{\sin(2x) + i \sinh(2y)}{\cos(2x) + \cosh(2y)}.$$

### See Also

atan, atan2, sin, cos, sec, csc, cot

## tanh

### tanh (num)

The tanh function returns the hyperbolic tangent of *num*:

$$\tanh(x) = \frac{e^x - e^{-x}}{e^x + e^{-x}}.$$

In complex expressions, *num* is complex, and tanh(*num*) returns a complex value.

### See Also

sinh, cosh, coth

## Text2Bezier

**Text2Bezier**[ *flags* ] *fontNameStr*, *fstyle*, *textStr*, *xWaveName*, *yWaveName*

The Text2Bezier operation creates the data for a Bezier curve corresponding to the outline of some text using the supplied font information. The output waves are formatted to be drawn using Igor's DrawBezier operation.