hermiteGauss

hermiteGauss(*n*, *x*)

The hermiteGauss function returns the normalized Hermite polynomial of order *n*:

$$H_n(x) = \frac{1}{\sqrt{\sqrt{\pi}\,2^n\,n!}}(-1)^n \exp\left(x^2\right)\frac{d^n}{dx^n}\exp\left(-x^2\right).$$

Here the normalization was chosen such that

$$\int_{-\infty}^{\infty} e^{-x^2} H_n(x) H_m(x)\,dx = \delta_{mn},$$

where δ_{nm} is the Kronecker symbol.

You can verify the Hermite-Gauss normalization using the following functions:

```
Function TestNormalization(order)
   Variable order

   Variable/G theOrder = order
   // The integrand vanishes in double-precision outside [-30,30]
   Print/D Integrate1D(hermiteIntegrand,-30,30,2)
End

Function HermiteIntegrand(inX)
   Variable inX

   NVAR n = root:theOrder
   return HermiteGauss(n,inx)^2*exp(-inx*inx)
End
```

See Also

The **hermite** function.

hide

#pragma hide = *value*

The hide pragma allows you to make a procedure file invisible.

See Also

The **The hide Pragma** on page IV-54 and **#pragma**.

HideIgorMenus

HideIgorMenus [***MenuNameStr*** [**,** ***MenuNameStr***]…

The HideIgorMenus operation hides the named built-in menus or, if none are explicitly named, hides all built-in menus in the menu bar.

The effect of HideIgorMenus is lost when a new experiment is opened. The state of HideIgorMenus is saved with the experiment.

User-defined menus are not hidden by HideIgorMenus unless attached to built-in menus and the menu definition uses the hideable keyword.

Parameters

MenuNameStr The name of an Igor menu, like “File”, “Data”, or “Graph”.

Details

The optional menu names are in English and not abbreviated. This ensures that code developed for a localized version of Igor will run on all versions.

The built-in menus that can be shown or hidden (the Help menu can be hidden only on Windows) are those that appear in the menu bar: