

NAME

AddDrawobj - add line, rectangle or circle

SYNOPSIS

AddDrawobj (line | rect | circle) (2D | 3D)

DESCRIPTION

Add a line, rectangle or circle for annotation.
The first argument selects the type of drawing object.

If the second argument is 2D, the object is placed at a default location and can be moved to the desired place. It will always keep its screen position and is not related to any spectrum.

If the second argument is 3D, the initial position in space is near the center of the selected spectrum. The position relative to this spectrum can be changed with the mouse or with the MoveDrawobj command.

EXAMPLES

AddDrawobj line 3D

SEE ALSO

SelectSpec, ColorPrim, LinePrim, StyleDrawobj, MoveDrawobj, RemovePrim, AddTitle, AddText

DATE

960912

NAME

AddText - add 3D text annotation

SYNOPSIS

AddText expr string

DESCRIPTION

Add a 3D text annotation. The first argument gives the initial size, the second argument the text.

The initial position in space is at the center of the selected spectrum. It can be moved with the mouse or with the MovePrim command.

For an explanation on how to enter greek letters, sub- and superscript, see the manual page of the EditText command.

EXAMPLES

AddText 0.15 "Label"

SEE ALSO

EditText, ColorPrim, LinePrim, MovePrim, SizeText, AddTitle, RemovePrim

DATE

960912

NAME

AddTitle - add 2D text annotation

SYNOPSIS

AddTitle <coord> expr string

DESCRIPTION

Add a text annotation at a given screen position. The screen position must be entered by a mouse click or on the command line. The second argument is the size, the third the string to be displayed.

For an explanation on how to enter greek letters, sub- and superscript, see the manual page of the EditText command.

EXAMPLES

AddTitle 0.5 0.3 0.15 "Label"

SEE ALSO

EditText, ColorPrim, LinePrim, MovePrim, SizeText, AddText, RemovePrim

DATE

960912

NAME

AnglePeak - set angle of line attached to peaks

SYNOPSIS

AnglePeak expr

DESCRIPTION

Set the angle of the lines drawn from the center of all selected peaks. The angle is given in radians. A line is only drawn when the length (LengthPeak) is positive, and the style is 'circle'.

EXAMPLES

AnglePeak 0.5

SEE ALSO

SelectPeak, StylePeak, LengthPeak

DATE

960912

NAME

AttrSpec - list attributes of spectra
AttrPeak - list attributes of peaks
AttrPrim - list attributes of primitives

SYNOPSIS

AttrSpec
AttrPeak
AttrPrim

DESCRIPTION

Lists the values of the attributes of all selected spectra, peaks or primitives. All items have to share the same set of attributes, an error message is issued otherwise.

Also creates a macro that can be used to set all the attributes to these values.

EXAMPLES

AttrPeak

SEE ALSO

Select*, Color*, Material*, Texture*, Style*, Line*

DATE

960912

NAME

BackColor - change background color

SYNOPSIS

BackColor expr expr expr

DESCRIPTION

Set the background color. The color is given by its Red, Green and Blue component, all in the range between 0.0 and 1.0.

EXAMPLE

BackColor 1.0 0.2 0.7

DATE

960912

NAME

ClipPos - set position of clipping planes
ClipSize - set distance of clipping planes

SYNOPSIS

ClipPos expr
ClipSize expr

DESCRIPTION

Set new values for the distance of the near and far clipping planes. By ClipPos, the user sets the position of the middle between the two planes, by ClipSize the distance:

$$\begin{aligned} \text{near} &= \text{pos} - \text{size} / 2 \\ \text{far} &= \text{pos} + \text{size} / 2 \end{aligned}$$

EXAMPLES

ClipPos 8.0
ClipSize 5.0

DATE

950912

NAME

ClusterShape - group similar shapes into clusters

SYNOPSIS

ClusterShape expr expr expr expr

DESCRIPTION

Group similar shapes of all selected spectra into clusters. This command is executed after Identify and before Deconv.

The first argument gives the direction (domain) of the shapes that should be clustered. Domain 0 is the detection domain, 1 the evolution domain in a 2D spectrum, etc.

The next argument gives the desired number of clusters. This can be given as the expected number of chemical shifts, but it is normally given as 1, so that the clustering is only stopped when the maximum difference given as last argument is reached.

The next argument gives a minimal difference between two clusters, this is only important if a desired number of clusters was given in the previous argument, otherwise any small number will do.

The last argument gives the maximum difference of two shapes to be in the same cluster. This value is typically between 1.0 and 2.0.

EXAMPLE

```
ClusterShape 0 1 0.2 1.0
ClusterShape 1 1 0.2 1.0
```

SEE ALSO

Identify, SelectSpec, Deconv

DATE

960913

NAME

ColorSpec - set color of spectra
ColorPeak - set color of peaks
ColorPrim - set color of primitives

SYNOPSIS

ColorSpec expr expr expr
ColorPeak expr expr expr
ColorPrim expr expr expr

DESCRIPTION

Set the color of all selected spectra, peaks or primitives. The color is given by its Red, Green and Blue component, all in the range between 0.0 and 1.0.

EXAMPLES

ColorPeak 1.0 0.0 0.0

SEE ALSO

Select*, Material*, Texture*

DATE

960912

NAME

Deconv - deconvolute regions to find more peaks

SYNOPSIS

Deconv expr expr

DESCRIPTION

Deconvolute all selected regions to find additional peaks that were not found with Identify. The Identify and ClusterShape commands must be executed before using this command.

The first argument gives a minimal amplitude for peaks identified, as factor of the noise level. This is typically between 1.5 and 3.0.

The second argument defines how large the match between a potential peak and the data has to be. With a value in the range of 0.5, only very well matching peaks are found, a value in the range of 0.0 will also find rather questionable peaks. Typical values are around the middle of these two values.

EXAMPLE

Deconv 1.5 0.2

SEE ALSO

Segment, Identify, ClusterShape, SelectSpec

DATE

960913

NAME

DefPropSpec - define spectrum property
DefPropPeak - define peak property
DefPropPrim - define primitive property

SYNOPSIS

```
DefPropSpec propertyName expr  
DefPropPeak propertyName expr  
DefPropPrim propertyName expr
```

DESCRIPTION

Define a property with the given name by the given expression. See SelectSpec for a description of the expression syntax. Properties can be used in other property definitions or selections. The Select commands are actually just special cases of the DefProp commands, they defines the property with the name "selected". The following properties are used internally by the program and should not be defined by this command:

```
all  
visible
```

The value of the "visible" property is maintained by the program, it is set for all spectra, peaks and primitives that have their attributes (Style*) set in a way to make them visible. This is very convenient for selecting only visible items.

The "displayed" property is used by the program to decide which items should be displayed. It is not recommended to modify it, it is normally better to use the Style* commands for changing the visibility. It is very useful for spectra, however, but the DialSpec command is more convenient for modifying it in this case.

The "movable" property is used by the program to decide which items are moved by rotations etc. It only has an influence for spectra, and the DialSpec command is more convenient for modifying it.

Some properties are predefined, they can be seen in the file:

```
$MOLMOLHOME/setup/PropDef
```

or with the HelpProp command.

EXAMPLES

```
DefPropPeak 'good' 'qual > 0.4'
```

SEE ALSO

DialSelect, SelectSpec, ..., DialSpec, HelpProp

DATE

960912

NAME

DialColor - switch color dialog on and off

SYNOPSIS

DialColor (off | on)

DESCRIPTION

Switch color dialog on and off. The color dialog is a convenient interface to the commands BackColor, ColorSpec, ColorPeak and ColorPrim.

EXAMPLE

DialColor on

SEE ALSO

BackColor, ColorSpec, ColorPeak, ColorPrim

DATE

960912

NAME

DialSelect - switch selection dialog on and off

SYNOPSIS

DialSelect (off | on)

DESCRIPTION

Switch selection dialog on and off. The selection dialog is a convenient interface to the commands SelectSpec, SelectPeak and SelectPrim.

EXAMPLE

DialSelect on

SEE ALSO

SelectSpec, ..., DefPropSpec, ...

DATE

960912

NAME

DialSpec - switch spectrum dialog on and off

SYNOPSIS

DialSpec (off | on)

DESCRIPTION

Switch spectrum dialog on and off. The spectrum dialog can be used to select spectra and for toggling their displayed and movable states. It is a convenient interface to the commands SelectSpec and DefPropSpec.

EXAMPLE

DialSpec on

SEE ALSO

SelectSpec, DefPropSpec

DATE

960912

NAME

DialStyle - switch style dialog on and off

SYNOPSIS

DialStyle (off | on)

DESCRIPTION

Switch style dialog on and off. The style dialog is a convenient interface to the commands StyleSpec and StylePeak.

EXAMPLE

DialStyle on

SEE ALSO

SelectSpec, SelectPeak, DialSelect,
StyleSpec, StylePeak

DATE

960912

NAME

DrawDelay - set drawing delay

SYNOPSIS

DrawDelay expr

DESCRIPTION

Set a delay for drawing. The program will pause for the given time (in milliseconds) after each redraw. This can be useful on machines without double buffering, to avoid too much flickering.

EXAMPLE

DrawDelay 100

DATE

960912

NAME

DrawPrec - set drawing precision

SYNOPSIS

DrawPrec expr

DESCRIPTION

Set the precision for certain drawing operations, e. g. for the approximation of spheres. Making this value larger improves the drawing quality, but makes the drawing slower. Reasonable values are in the range between 2 (moderate quality) and 4 (good quality).

The value used for plotting can be set separately with the PlotPar command.

EXAMPLE

DrawPrec 3

SEE ALSO

PlotPar

DATE

960912

NAME

DrawSize - set size of drawing area

SYNOPSIS

DrawSize (set | save | restore) [expr expr]

DESCRIPTION

If the first argument is 'set', set the size of the drawing area to the given width and height (in pixels). This can be useful in connection with plotting, so that the user can enforce a certain aspect ratio for the resulting plot.

With the first argument 'save', the current size is saved, this size can be restored by executing the command with the first argument 'restore'. The saved size is also stored in parameter and dump files.

EXAMPLE

```
DrawSize save
DrawSize set 1000 750
DrawSize restore
```

SEE ALSO

PlotPar

DATE

960912

NAME

Expand - expand spectrum

SYNOPSIS

Expand { expr expr }

DESCRIPTION

Set the currently visible part of all selected spectrums. The part is given as a pair of coordinates (in points) in each direction. Regions will scale together with the spectrum they belong to. Calculation commands operating on spectra (Noise, Segment) only operate on the currently expanded region.

EXAMPLE

Expand 1024 2047 256 511

SEE ALSO

Resolution, Level, Scale

DATE

960913

NAME

Fog - setup of fog (depth cueing)

SYNOPSIS

Fog (off | exp | exp2 | linear) expr expr expr

DESCRIPTION

Set fog mode and parameters. The first argument selects the mode (off, exponential, squared exponential, linear). The second argument selects the density for both kinds of exponential fog. The third and fourth argument give the start and end distance for linear fog.

Negative values for any of the numerical arguments will leave the value unchanged, this is useful for changing only one value if the command is put on a slider.

Not all fog modes are supported on all hardware.

EXAMPLE

Fog linear 0.1 7.0 13.0

DATE

960912

NAME

Fullscreen - switch fullscreen display on and off

SYNOPSIS

Fullscreen (off | on)

DESCRIPTION

Switch fullscreen display on and off. Fullscreen mode is usefull for making screen photos and it is required for stereo display on most machines. Note that the menu and the command line are not visible in fullscreen mode. If the Fullscreen command is in the popup menu (right mouse button), this is the easiest way to switch back to normal mode. You can also type commands in fullscreen mode, but it is not very convenient because there is no feedback.

EXAMPLE

Fullscreen on

SEE ALSO

Stereo

DATE

960912

NAME

HelpApropos - locate commands by keyword

SYNOPSIS

HelpApropos string

DESCRIPTION

Show a list of all commands that have the given keyword in their one-line description. The menu that the command can be found in is given in parentheses. The keyword may contain wildcard characters (? , *), the search is case insensitive.

EXAMPLE

HelpApropos "plot"

SEE ALSO

HelpCmd

DATE

960912

NAME

HelpButton - show definition of buttons

SYNOPSIS

HelpButton

DESCRIPTION

Show the file that contains the definition of the buttons.

EXAMPLE

HelpButton

SEE ALSO

PathNames

DATE

960912

NAME

HelpCmd - get help on command

SYNOPSIS

HelpCmd

DESCRIPTION

Switch to help mode. The next command that is entered on the command line or selected in the menu will not be executed, but the according help text will be displayed instead.

EXAMPLE

HelpCmd

DATE

960912

NAME

HelpMouse - show help text about using the mouse

SYNOPSIS

HelpMouse

DESCRIPTION

Show a text that explains how to use the mouse.

EXAMPLE

HelpMouse

DATE

960912

NAME

HelpProp - show definition of standard properties

SYNOPSIS

HelpProp

DESCRIPTION

Show the file that contains the definition of the standard properties.

EXAMPLE

HelpProp

SEE ALSO

PathNames, DefProp*, Select*

DATE

960912

NAME

Identify - identify simple peaks

SYNOPSIS

Identify expr { expr } { expr } expr expr

DESCRIPTION

Find the peaks that can be simply identified in all selected regions. The Segment command must be executed before using this command.

The first argument gives a minimal amplitude for peaks identified, as factor of the noise level. This is typically between 2.0 and 5.0.

The next arguments give a minimal size (in data points) for each direction used for doing the necessary calculations of symmetry etc. This is typically chosen the same or somewhat less than the minimal size given for segmentation.

The next arguments give a maximal splitting of peaks (in data points) for each direction. A value of 1.0 should be given if no splitting is expected.

The next argument gives the allowed relative difference of amplitudes for split peaks. This is typically a very small value.

The last argument is the maximum allowed symmetry error of a peak relative to its amplitude. If the error is larger than this value, it is considered to be consisting of multiple peaks. Typical values are between 0.1 and 0.5.

EXAMPLE

Identify 3.0 3 2 5.0 1.0 0.02 0.5

SEE ALSO

Segment, SelectSpec, ClusterShape

DATE

960913

NAME

InitAll - delete and initialize everything

SYNOPSIS

InitAll (yes | no)

DESCRIPTION

Delete all data and initialize the program. This can be used before starting with something new. It is also needed after changing certain parameters (see PathNames) to make sure that they take effect.

The command asks for a confirmation.

EXAMPLE

InitAll yes

SEE ALSO

PathNames, RemoveSpec

DATE

960912

NAME

LabelPeak - set format of peak label

SYNOPSIS

LabelAtom string

DESCRIPTION

Set the format of the label of all selected peaks. If the character 'N' appears in the string, it is replaced by the peak number. 'A' is replaced by the amplitude, 'S' by the symmetry error, 'U' by the uniformity error, and 'Q' by the quality. All other characters are displayed in the label unchanged.

EXAMPLE

LabelPeak "Q"

SEE ALSO

SelectPeak

DATE

960912

NAME

LengthPeak - set length of line attached to peaks

SYNOPSIS

LengthPeak expr

DESCRIPTION

Set the length of the lines drawn from the center of all selected peaks. A line is only drawn when the style is 'circle'.

EXAMPLES

LengthPeak 0.5

SEE ALSO

SelectPeak, StylePeak, AnglePeak

DATE

960912

NAME

Level - set contouring level of spectra

SYNOPSIS

Level expr

DESCRIPTION

Set the minimal level of all selected spectra as fraction of the maximal value. For regions, the given value is automatically clamped at the segmentation level, so that a very small value can be given for displaying the whole region.

EXAMPLE

Level 0.001

SEE ALSO

Resolution, Expand, Scale, StyleSpec

DATE

960913

NAME

Light - setup of light source

SYNOPSIS

Light (off | point | infinite) expr expr expr

DESCRIPTION

The first argument selects between no light source, a point light source or a light source at infinity. The coordinates are used as position if a point light source was chosen as point, or only as direction for an infinite light source. Point light sources might not be supported on all hardware, or they may be slower than infinite light sources.

EXAMPLE

Light point 0 5 5

DATE

960912

NAME

LineSpec - set style and width of spectrum lines
LinePeak - set style and width of peak lines
LinePrim - set style and width of primitive lines

SYNOPSIS

```
LineSpec (solid | dashed ) expr  
LinePeak (solid | dashed ) expr  
LinePrim (solid | dashed ) expr
```

DESCRIPTION

Set the style and width of the lines used for drawing all selected spectra, peaks or primitives. The default width of 0 is the minimal width that can be drawn, it is also the one that can be drawn fastest.

EXAMPLE

```
LinePrim solid 3
```

SEE ALSO

Select*, Color*

DATE

960912

NAME

ListPropSpec - list all spectrum properties
ListPropPeak - list all peak properties
ListPropPrim - list all primitive properties

SYNOPSIS

ListPropSpec
ListPropPeak
ListPropPrim

DESCRIPTION

Lists the set properties of all selected spectra, peaks or primitives. All items have to share the same set of properties, an error message is issued otherwise.

EXAMPLES

ListPropPeak

SEE ALSO

DefProp*, Select*

DATE

960912

NAME

MaterialSpec - set material properties of spectra
MaterialPeak - set material properties of peaks
MaterialPrim - set material properties of primitives

SYNOPSIS

```
MaterialSpec expr expr expr expr expr expr expr  
MaterialPeak expr expr expr expr expr expr expr  
MaterialPrim expr expr expr expr expr expr expr
```

DESCRIPTION

Set the material properties of all selected spectra, peaks primitives. The first three parameters give the coefficients for ambient, diffuse and specular reflection. For good results, the ambient and diffuse terms should sum up to around 1.

The fourth parameter gives the shininess, it only has an effect if the specular coefficient is not zero. Higher values for the shininess result in smaller specular highlights. Values can be from 1.0 (very dull) to 200 and more (highly polished metal).

The fifth parameter gives the reflection. 1.0 results in a complete reflection of other objects in the scene (mirror), 0.0 in no reflection.

The sixth parameter gives the opacity. 1.0 results in a completely opaque material, 0.0 in complete transparency.

The seventh parameter gives the index of refraction, it only has an influence for (partly) transparent materials. 1.0 gives no refraction, 1.5 is the value for glass, 2.4 for diamond.

Transparency is not supported on most hardware, and only to a limited amount on machines with high-end graphics. It is mainly useful for preparing files for ray tracing (PlotPOV). Reflection is not supported on screen, it is only used for ray tracing.

Giving a value less than 0.0 for any value will not change it, this is useful for changing only part of the parameters.

EXAMPLES

```
MaterialSpec 0.3 0.7 0.4 30 0.0 1.0 1.0
```

SEE ALSO

Select*, Texture*, PlotPov

DATE

960912

NAME

Memory - set memory buffer size for spectrum input

SYNOPSIS

Memory expr

DESCRIPTION

Set the size of the memory buffer for input of spectra. The size is given in MBytes, the default value is 4. Making the value larger makes the reading of spectra faster, but requires more memory.

EXAMPLE

Memory 16

SEE ALSO

OpenBruker, OpenEasy

DATE

960912

NAME

MoveDrawobj - move draw object

SYNOPSIS

MoveDrawobj expr expr expr expr

DESCRIPTION

Move all selected draw objects (like lines or rectangles) by the given amount. The first argument gives the index of the control point (starting at 0) to be moved, the rest of the arguments give the amount of movement in each direction.

Moving the control points of drawing objects is normally done interactively by using the middle mouse button.

EXAMPLE

MoveDrawObj 0 0.3 0.1 0.2

SEE ALSO

AddDrawobj, SelectPrim

DATE

960912

NAME

MovePrim - move primitive

SYNOPSIS

MovePrim expr expr expr

DESCRIPTION

Move all selected primitives by the given amount. Only circles, cylinders and texts can currently be moved. Moving texts is normally done interactively by using the middle mouse button.

EXAMPLE

MovePrim 0.3 0.1 0.2

SEE ALSO

SizeText, RadiusPrim

DATE

960912

NAME

MoveX - move spectra in X direction

SYNOPSIS

MoveX expr

DESCRIPTION

Move all movable (set with DialSpec) molecules by the given amount in X direction. Moving is normally done interactively by pressing the middle mouse button. This command is useful for being used in macros or for setting up the slider box.

EXAMPLE

MoveX 10

SEE ALSO

DialSpec, MoveY, MoveZ

DATE

960912

NAME

MoveY - move spectra in Y direction

SYNOPSIS

MoveY expr

DESCRIPTION

Move all movable (set with DialSpec) spectra by the given amount in Y direction. Moving is normally done interactively by pressing the middle mouse button. This command is useful for being used in macros or for setting up the slider box.

EXAMPLE

MoveY 10

SEE ALSO

DialSpec, MoveX, MoveZ

DATE

960912

NAME

MoveZ - move spectra in Z direction

SYNOPSIS

MoveZ expr

DESCRIPTION

Move all movable (set with DialSpec) spectra by the given amount in Z direction. Moving in Z direction is very similar to zooming, which is normally done interactively by pressing the left and the middle mouse buttons simultaneously. The effect is somewhat different if a perspective projection is chosen, and also the clipping planes work differently.

EXAMPLE

MoveZ 10

SEE ALSO

DialSpec, MoveX, MoveY, Zoom*,
ClipPos, ClipSize, Projection

DATE

960912

NAME

Noise - calculate noise values

SYNOPSIS

Noise

DESCRIPTION

Calculate noise values for all selected spectra.
This must be done before using the Segment command.

The program handles the noise as spectrum. By default it is invisible, but this can be changed with StyleSpec.

EXAMPLE

Noise

SEE ALSO

OpenBruker, OpenEasy, SelectSpec, Segment

DATE

960913

NAME

OpenBruker - open BRUKER file

SYNOPSIS

OpenBruker fileName

DESCRIPTION

Open a file in BRUKER format. The name given must be the name of a processed data file, e. g. 2rr, the parameter files will automatically be read from the same directory.

2D spectra will be displayed as contours by default, spectra with more dimension will not be displayed until their style is changed with StyleSpec.

EXAMPLE

OpenBruker /home/joe/data/foo/1/pdata/1/2rr

SEE ALSO

OpenEasy, StyleSpec

DATE

960913

NAME

OpenEasy - open EASY file

SYNOPSIS

OpenEasy fileName

DESCRIPTION

Open a file in EASY format. The name given must be the name of a parameter file, the corresponding data file will automatically be read from the same directory.

2D spectra will be displayed as contours by default, spectra with more dimension will not be displayed until their style is changed with StyleSpec.

EXAMPLE

OpenEasy /home/joe/data/foo.param

SEE ALSO

OpenBruker, StyleSpec

DATE

960913

NAME

PathNames - set path names

SYNOPSIS

PathNames string string string

DESCRIPTION

Set path names for some configuration files.
Normally the program reads these file from the
directory \$MOLMOLHOME/setup.

The following is a list of all configuration files:

PropDef: Contains definitons of standard
properties.

MenuDir: Directory that contains menu definition
files (MenuBar, *.menu, Popup, Valuator).

ColorList: List of colors used for DialColor.

Generally the configuration files are read when
they are used the first time, and the contents is
kept in memory. This means that changing the path
only has an effect after leaving the program and
starting it again. This is always true for MenuDir.
It is also necessary for ColorList if the color
dialog (DialColor) was opened and for PropDef as
soon as a spectrum was loaded.

If the file with the given path name cannot be
openend, the program will silently fall back to the
default file.

The special name "0" can be given for path names,
in this case an empty file will be taken for the
corresponding configuration file.

EXAMPLE

```
PathNames "myprop" " " "
```

SEE ALSO

DialColor, InitAll, DefProp*

DATE

960913

NAME

PlotCps - make a color PostScript plot

SYNOPSIS

PlotCps fileName

DESCRIPTION

Make a color PostScript plot of the current screen contents. If a nice plot of a schematic drawing is desired (shading, hidden surface elimination), this has to be selected with the command Rendering first. Hidden surface elimination of complex scenes can take a long time.

EXAMPLE

PlotCps /home/joe/MyPlot.ps

SEE ALSO

Rendering, Stereo, PlotPs

DATE

960912

NAME

PlotFm3 - make a FrameMaker 3 plot
PlotFm4 - make a FrameMaker 4 plot

SYNOPSIS

PlotFm3 fileName
PlotFm4 fileName

DESCRIPTION

Make a plot of the current screen contents in MIF format. This can be imported into FrameMaker.

PlotFm3 produces a file that can be read by FrameMaker 3 or later. This only supports 8 different colors.

PlotFm4 makes use of color possibilities introduced in FrameMaker 4, these files cannot be read by earlier versions. They are also larger.

EXAMPLE

PlotFm4 /home/joe/MyPlot.fm

SEE ALSO

Rendering, PlotCps, PlotPs

DATE

960912

NAME

PlotJpeg - make a JPEG plot

SYNOPSIS

PlotJpeg fileName

DESCRIPTION

Save the current screen contents as JPEG File. The horizontal resolution can be set with the PlotPar command, the vertical resolution is calculated to maintain the aspect ratio of the screen.

Note that that JPEG uses a lossy compression scheme, the quality factor can be adjusted with the PlotPar command.

This command is not supported on all machines and with all graphics systems. It will give an appropriate error message if it is not supported.

The freely available JPEG library written by the Independent JPEG Group is used for writing the JPEG file.

EXAMPLE

PlotJpeg /home/joe/MyPlot.jpg

SEE ALSO

PlotPar, PlotTiff, PlotPng,
PlotFm3, PlotFm4, PlotCps, PlotPs

DATE

960912

NAME

PlotPar - set plot parameters

SYNOPSIS

```
PlotPar expr expr expr expr expr  
      ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 )  
      expr expr expr
```

DESCRIPTION

Set size and options for plots. The first argument gives the width of the paper, the second one the height. The third argument gives the width of the plot, the fourth one the height. If one of the plot sizes is 0, it is calculated to correspond to the dimensions (aspect ratio) of the window. The plot is centered on the paper.

The current unit for these sizes is shown in the prompt, it can be changed with the PlotUnit command. The default paper size also depends on the current unit.

The fifth argument selects the horizontal resolution used for saving image (TIFF, JPEG, PNG) files.

The first option switches stereo plotting on or off.

The second option switches shading and hidden surface elimination for the plot. The third only has an influence if shading is switched on. If it is selected, a full hidden surface elimination is done. This can take a few minutes for complex plots, but it is necessary to produce perfect results as soon as the scene contains spheres, cylinders or primitives. If it is not selected, a simple depth sorting is used, which is much faster, but the result can contain slight errors. For important plots (publications), this option must always be switched on.

The fourth option selects whether the plot is rotated by 90 degrees to produce a landscape plot. Note that the size of the plot (arguments 3 and 4) is still given in the original orientation of the plot, before rotation. The size of the paper is given in the orientation used by the printer, which is normally portrait. So e. g. good size for a landscape plot on A3 format are 29.7 42 0 26.

The third but last parameter select the precision (resolution) of the plot. See DrawPrec for an explanation of this parameter.

The second but last parameter selects a gamma correction parameter. 1.0 will leave the colors unchanged, values less than 1.0 will make the colors brighter, values greater than 1.0 will make the colors darker. Note

that the "correct" gamma value depends on the output device used, so using gamma correction when producing the file is in principal not the right thing to do. We offer this possibility for convenience sake, it is often difficult to do decent gamma correction on the output file (e. g. for PostScript) with other possibilities.

The last parameter selects the quality for JPEG plots. Recommended values are between 50 (strong compression with reasonable quality) and 95 (excellent quality).

EXAMPLES

```
PlotPar 21 29.7 18 0 1000 0 0 1 0 3 1.0 75
PlotPar 21 29.7 0 18 2000 0 1 1 1 3 0.7 60
PlotPar 29.7 42 0 26 1500 0 1 1 1 4 0.5 90
```

SEE ALSO

PlotUnit, PlotCps, PlotPs, PlotFm*,
PlotTiff, PlotJpeg, PlotPng, DrawPrec

DATE

960912

NAME

PlotPng - make a PNG plot

SYNOPSIS

PlotPng fileName

DESCRIPTION

Save the current screen contents as PNG File. The horizontal resolution can be set with the PlotPar command, the vertical resolution is calculated to maintain the aspect ratio of the screen.

This command is not supported on all machines and with all graphics systems. It will give an appropriate error message if it is not supported.

The freely available PNG library written by Guy Eric Schalnat, Group 42, Inc., is used for writing the PNG file.

EXAMPLE

PlotPng /home/joe/MyPlot.png

SEE ALSO

PlotPar, PlotTiff, PlotJpeg,
PlotFm3, PlotFm4, PlotCps, PlotPs

DATE

960912

NAME

PlotPov - make a POV-Ray plot

SYNOPSIS

PlotPov fileName

DESCRIPTION

Make a plot of the current screen contents in POV-Ray format. This can be used as input file for the ray tracing package POV-Ray (Persistence of Vision Ray Tracer) to produce high quality pictures.

The POV-Ray software is available free of charge by anonymous ftp from <ftp.povray.org>, directory /pub/povray/Official. See the accompanying files for copyright conditions and instructions on installation and use of the program. The output files were tested with version 2.2 of POV-Ray.

EXAMPLE

PlotPov /home/joe/MyPlot.pov

SEE ALSO

PlotFm*, PlotCps, PlotPs

DATE

960912

NAME

PlotPs - make a black and white PostScript plot

SYNOPSIS

PlotPs fileName

DESCRIPTION

Make a black and white PostScript plot of the current screen contents.

EXAMPLE

PlotPs /home/joe/MyPlot.ps

SEE ALSO

Rendering, Stereo, PlotCps

DATE

960912

NAME

PlotTiff - make a TIFF plot

SYNOPSIS

PlotTiff fileName

DESCRIPTION

Save the current screen contents as TIFF File. The horizontal resolution can be set with the PlotPar command, the vertical resolution is calculated to maintain the aspect ratio of the screen.

This command is not supported on all machines and with all graphics systems. It will give an appropriate error message if it is not supported.

The freely available TIFF library written by Sam Leffler, Copyright (c) 1988-1995 Sam Leffler and Silicon Graphics, is used for writing the TIFF file.

EXAMPLE

PlotTiff /home/joe/MyPlot.tif

SEE ALSO

PlotPar, PlotJpeg, PlotPng,
PlotFm3, PlotFm4, PlotCps, PlotPs

DATE

960912

NAME

PlotUnit - set unit of plot parameters

SYNOPSIS

PlotUnit (cm | mm | inch)

DESCRIPTION

Set the unit used for paper and plot sizes in the PlotPar command. Changing the unit will also reset the paper size to the default associated with the unit, which is A4 for cm and mm and US Letter for inch.

EXAMPLE

PlotUnit cm

SEE ALSO

PlotPar

DATE

960912

NAME

PlotVrml - make a VRML plot

SYNOPSIS

PlotVrml fileName

DESCRIPTION

Make a plot of the current screen contents in VRML (Virtual Reality Modeling Language) format. VRML is the standard format for transferring and displaying three-dimensional geometry on the World Wide Web. The created files follow version 1.0 of the VRML specifications and can be displayed by any VRML browser.

EXAMPLE

PlotVrml /home/joe/MyPlot.wrl

SEE ALSO

PlotFm*, PlotCps, PlotPs, PlotPov

DATE

960912

NAME

Projection - choose projection

SYNOPSIS

Projection (orthogonal | perspective)

DESCRIPTION

Choose between orthogonal and perspective projection.

EXAMPLE

Projection orthogonal

SEE ALSO

ClipPos, ClipSize, ViewAngle

DATE

960912

NAME

Quit - quit the program

SYNOPSIS

Quit

DESCRIPTION

Quit the program.

EXAMPLE

Quit

DATE

960913

NAME

RadiusPeak - set radius of peaks

SYNOPSIS

RadiusPeak expr

DESCRIPTION

Set the radius of all selected peaks.

EXAMPLES

RadiusPeak 0.1

SEE ALSO

SelectPeak, StylePeak, LengthPeak, AnglePeak

DATE

960912

NAME

RecordMac - open macro recorder

SYNOPSIS

RecordMac

DESCRIPTION

Open a macro recorder. The text area shows the macro recorded so far, it can also be edited manually. The 'Add' button adds the most recently executed commands, the number of commands is given in the text field. If 'automatic' is switched on, each executed command is recorded automatically.

The 'Test' button executes the recorded macro, the 'Save' button stores it with the given file name.

EXAMPLE

RecordMac

SEE ALSO

XMacUser

DATE

960912

NAME

Register - register as AUTOPSY user

SYNOPSIS

Register string string string string [string]

DESCRIPTION

Send an E-mail to register as AUTOPSY user. The first argument gives your name, the second argument the name of the organisation (university/company) where you work, the third argument the S-mail address, the fourth argument the E-mail address. The fifth argument is the program name and release, just leave the value that is automatically filled in.

Getting registered is strongly recommended, so that we can inform you of new releases and send you other useful information.

EXAMPLE

Register "Joe User" "Useless Univ."
"Street 42, Nowhere, USA" "joe@useless.edu"

DATE

960912

NAME

RemovePrim - remove primitive

SYNOPSIS

RemovePrim

DESCRIPTION

Remove all selected primitives (texts, etc.).

EXAMPLE

RemovePrim

SEE ALSO

AddTitle, AddText, AddDrawobj, SelectPrim

DATE

960912

NAME

RemoveSpec - remove spectra

SYNOPSIS

RemoveSpec

DESCRIPTION

Remove all selected spectra.

EXAMPLE

RemoveSpec

SEE ALSO

DialSpec

DATE

960912

NAME

Rendering - set rendering options

SYNOPSIS

```
Rendering ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 )  
          ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 )
```

DESCRIPTION

Set some rendering options. Depending on the output device, some options may always be enabled, no matter whether they are switched on or off by this command. Some of these options (like two-sided lighting) are also used to generate plots, so the appropriate options have to be set before giving the plotting command.

The following options are supported:

Anti Aliasing: Draw smooth lines. This may not be supported on all hardware.

Transparency: Use transparent drawing for objects that are not completely opaque. This may not be supported on all hardware.

Fast Spheres Drawing: Instead of approximating spheres with many polygons, they are drawn as circles. This makes shading impossible, but can make the display much faster.

Backface Elimination: Eliminate polygons that face away from the viewpoint at an early display step. This has normally no visual effect on the display, but can make it faster.

Shading: Color polygons depending on the angle from the light source and the view point. This is also necessary for the support of depth cueing on most devices, e. g. for plotting.

Two-sided Lighting: Normally lighting calculations are only done for the "outside" of an object. This triggers lighting calculation to be done for both sides. The effect is visible if objects are cut, mostly by the front clipping plane. It is not switched on by default on most devices because it can make all rendering slower.

Depth Sorting: Sort all display elements by depth before drawing. This gives a quick, but sometimes unexact, method for hidden surface elimination.

Hidden Surface Elimination: Eliminate display elements that are hidden by other elements closer to the viewpoint. If the hardware supports this feature, it is enabled by default. If it has to be emulated by the program, the display can get very slow.

EXAMPLE

Rendering 0 0 0 1 1 0 1 0

SEE ALSO

PlotPar PlotCps, PlotPs, PlotFm*, Fog

DATE

960913

NAME
Resolution - set display resolution

SYNOPSIS
Resolution { expr }

DESCRIPTION
Set the current display resolution (in number of points) for all selected spectra. The resolution is given with one integer value for each direction.

EXAMPLE
Resolution 256 256

SEE ALSO
Expand, Level, Scale

DATE
960913

NAME

RotateInit - undo all rotations

SYNOPSIS

RotateInit

DESCRIPTION

Bring all movable (set with DialSpec) spectra back to their original orientation.

EXAMPLE

RotateInit

SEE ALSO

DialSpec, RotateX, RotateY, RotateZ

DATE

960912

NAME

RotateX - rotate spectra around X axis

SYNOPSIS

RotateX expr

DESCRIPTION

Rotate all movable (set with DialSpec) molecules by the given angle around the X axis. Rotation is normally done interactively by pressing the left mouse button. This command is useful for being used in macros or for setting up the slider box.

EXAMPLE

RotateX 90

SEE ALSO

DialSpec, RotateY, RotateZ

DATE

960913

NAME

RotateY - rotate spectra around Y axis

SYNOPSIS

RotateY expr

DESCRIPTION

Rotate all movable (set with DialSpec) molecules by the given angle around the Y axis. Rotation is normally done interactively by pressing the left mouse button. This command is useful for being used in macros or for setting up the slider box.

EXAMPLE

RotateY 90

SEE ALSO

DialSpec, RotateX, RotateZ

DATE

960913

NAME

RotateZ - rotate spectra around Z axis

SYNOPSIS

RotateZ expr

DESCRIPTION

Rotate all movable (set with DialSpec) spectra by the given angle around the Z axis. Rotation is normally done interactively by pressing the left mouse button. This command is useful for being used in macros or for setting up the slider box.

EXAMPLE

RotateZ 90

SEE ALSO

DialSpec, RotateX, RotateY

DATE

960913

NAME

Scale - set contouring level of spectra

SYNOPSIS

Scale expr

DESCRIPTION

For all selected 2D spectra, set their scaling factor for amplitudes when they are displayed as surface.

EXAMPLE

Scale 10.0

SEE ALSO

Resolution, Expand, Level, StyleSpec

DATE

960913

NAME

Segment - spectrum segmentation

SYNOPSIS

Segment expr expr expr expr (0 | 1) { expr }

DESCRIPTION

Do a segmentation of all currently selected spectra. The Noise command must be executed before using this command.

The first argument gives the level for segmentation, as factor of the noise level. This is normally around 1.0.

The next argument gives a minimal level (also as factor of the noise level) for at least one of the points within a region. This is typically taken around 1.5 for high quality spectra, somewhat higher for spectra that are less well processed.

The next two arguments select which/if the diagonal should be excluded. This is done by giving the two domains between which the diagonal should be excluded, this will normally be 0 and 1. If no diagonal exclusion is desired, 0 should be given for both domains.

The next argument selects whether regions connected to the border of the spectrum should be excluded. In many spectra, the first/last rows are not properly baseline corrected, in this case this option should be selected.

The remaining arguments give a minimal size (in data points) for each direction.

The program handles the created regions as spectra. By default they are drawn as contours in 2D, and are invisible for more dimensions. This can be changed with StyleSpec.

EXAMPLE

Segment 1.0 1.5 0 1 1 3 2

SEE ALSO

OpenBruker, OpenEasy, SelectSpec, Noise, StyleSpec

DATE

961004

NAME

SelectSpec - select spectra
SelectPeak - select peaks
SelectPrim - select primitives

SYNOPSIS

SelectSpec expr
SelectPeak expr
SelectPrim expr

DESCRIPTION

Select spectra, peaks or primitives that satisfy a conditions specified by an expression. The expression must give a result of type boolean (truth value).

There are two special values not covered by the expression syntax below. If an empty string is given as expression, everything is selected. If the value "0" is given, nothing is selected (i. e. everything deselected).

The following is a formal syntax description of expressions in EBNF notation. Typical examples are shown in the next section.

```
expr      = andExpr { "|" andExpr } .
andExpr   = relExpr { "&" relExpr } .
relExpr   = simpleExpr [ relOp setExpr ] .
relOp     = "=" | "!=" | "<=" |
           "<" | ">=" | ">" .
setExpr   = rangeExpr { "," rangeExpr } .
rangeExpr = simpleExpr [ ".." simpleExpr ] .
simpleExpr = term { addOp term } .
addOp     = "+" | "-" .
term      = factor { mulOp factor } .
mulOp     = "*" | "/" | "%" .
factor    = [ "-" | "sqrt" | "log" | "!" ] primary .
primary   = constant | designator | "(" expr ")" .
constant  = string | int | float .
designator = [ qual "." ] field [ "[" int "]" ] .
qual      = "spec" | "peak" | "prim"
field     = "num" | "number" | "name" | "attr" |
           "amp" | "symm" | "unif" | "qual" |
           "shift0" | "shift1" |
           "shift2" | "shift3" |
           "width0" | "width1" |
           "width2" | "width3" |
           propertyName .
```

For selecting items by their number or name, there is a shorter notation of the form:

```
expr      = exprPart { exprPart } .
exprPart  = [ "#" set ] .
set       = sel { "," sel } .
sel       = string | range .
```

```
range = int ".." int | int "-" int .
```

Strings are not quoted in this notation.

The full and the short notation can be mixed, in this case a part written in the short notation behaves like a primary with a boolean value.

EXAMPLES

```
SelectSpec 'num > 2'  
  # all spectra but the first two  
SelectPeak 'qual > 0.3 & width0 > 4.0 & width1 > 1.0'  
  # all peaks with minimal quality of 0.3 and  
  # minimal line widths 4.0 and 1.0
```

SEE ALSO

```
DialSelect, DefPropMol,... , DialMol
```

DATE

```
960913
```

NAME

ShadePeak - set shading of peaks

SYNOPSIS

```
ShadePeak ( none | flat | gouraud | phong |  
           dots | lines )
```

DESCRIPTION

Set the shading method for peaks if they are displayed as spheres.

```
none:      no shading  
flat:      polygons shaded in uniform color  
gouraud:   color interpolated between vertices  
phong:     normals interpolated, highest quality  
dots:      draw surface using dots  
lines:     draw surface using lines
```

Not all graphics devices support all shading methods.

EXAMPLE

```
ShadePeak phong
```

SEE ALSO

SelectPeak, StylePeak, ColorPeak

DATE

960913

NAME

ShadePrim - set shading of primitives

SYNOPSIS

```
ShadePrim ( none | flat | gouraud | phong |  
           dots | lines )
```

DESCRIPTION

Set the shading method for primitives.

```
none:      no shading  
flat:      polygons shaded in uniform color  
gouraud:   color interpolated between vertices  
phong:     normals interpolated, highest quality  
dots:      draw surface using dots  
lines:     draw surface using lines
```

Not all graphics devices support all shading methods.

EXAMPLE

```
ShadePrim phong
```

SEE ALSO

```
SelectPrim, ColorPrim
```

DATE

960913

NAME

ShadeSpec - set shading of spectra

SYNOPSIS

```
ShadeSpec ( none | flat | gouraud | phong |  
           dots | lines )
```

DESCRIPTION

Set the shading method for spectra if they are displayed as surfaces.

```
none:      no shading  
flat:      polygons shaded in uniform color  
gouraud:   color interpolated between vertices  
phong:     normals interpolated, highest quality  
dots:      draw surface using dots  
lines:     draw surface using lines
```

Not all graphics devices support all shading methods.

EXAMPLE

```
ShadeSpec phong
```

SEE ALSO

SelectSpec, StyleSpec, ColorSpec

DATE

960913

NAME

SizeText - resize text

SYNOPSIS

SizeText (abs | rel) expr

DESCRIPTION

Resize all selected text primitives. If the first argument is 'abs', all sizes are set to the given value. If it is 'rel', the given value is added to the current size.

Resizing texts is normally done interactively by using the middle mouse button.

EXAMPLE

SizeText abs 0.15

SEE ALSO

MovePrim

DATE

960913

NAME

StartAnim - start animation

SYNOPSIS

StartAnim (once | cycle) int

DESCRIPTION

Start an animation. This can be used for displaying series of spectra. If the first argument is "once", every selected spectrum will be displayed once. If it is "cycle", the program will loop through all selected spectra until the StopAnim command is executed. The second argument is the minimal delay in milliseconds between displaying spectra.

It is possible to execute the command while an animation is running, e. g. for changing the delay.

EXAMPLE

StartAnim cycle 50

SEE ALSO

SelectSpec, DialMol, StopAnim

DATE

960913

NAME

StartRock - start rock

SYNOPSIS

StartRock (once | cycle) int

DESCRIPTION

Start to rotate spectra automatically. There are parameters for two phases, so that it is possible to rotate back and forth. If the first argument is "once", the movement will only happen once. If it is "cycle", the program will repeat it until the StopRock command is executed.

The second argument is the minimal delay in milliseconds between rotations. The rest of the arguments are rotation angles for all three axis and number of steps.

It is possible to execute the command while rocking is running, e. g. for changing the delay.

EXAMPLE

StartRock cycle 50 0 10 0 18 0 -10 0 18

SEE ALSO

StopRock

DATE

960913

NAME

Stereo - set stereo mode

SYNOPSIS

Stereo (off | left | right | side_by_side |
cross_eye | hardware)

DESCRIPTION

Set stereo mode. Hardware stereo is not supported by all hardware. If it is supported, it normally works only in fullscreen mode (see command Fullscreen).

Hardware stereo is also supported for certain plot devices. E. g. generating a PostScript plot in hardware stereo mode will produce a side by side stereo image with the correct eye distance, while the distance between the images will very likely be wrong when plotting in side_by_side mode.

EXAMPLE

Stereo side_by_side

SEE ALSO

Fullscreen

DATE

960913

NAME

StopAnim - stop animation

SYNOPSIS

StopAnim

DESCRIPTION

Stop an animation started with StartAnim.

EXAMPLE

StopAnim

SEE ALSO

StartAnim

DATE

960913

NAME

StopRock - stop rock

SYNOPSIS

StopRock

DESCRIPTION

Stop automatic rotation started with StartRock.

EXAMPLE

StopRock

SEE ALSO

StartRock

DATE

960913

NAME

StyleDrawobj - set display style of draw objects

SYNOPSIS

StyleDrawobj (invisible | line | cylinder | neon)

DESCRIPTION

Set the display style of all selected draw objects (lines etc.). The style cylinder draws the object as a cylinder with flat ends, neon draws it as cylinder with round ends. Not all display styles are supported for all draw objects types.

EXAMPLE

StyleDrawobj cylinder

SEE ALSO

SelectPrim, AddDrawobj, ColorPrim

DATE

960913

NAME

StylePeak - set display style of peaks

SYNOPSIS

StylePeak (invisible | circle | cross)

DESCRIPTION

Set the display style of all selected peaks.
The style 'circle' is drawn as sphere for 3D
display, 'cross' as tetrahedron.

EXAMPLE

StylePeak sphere

SEE ALSO

SelectPeak

DATE

960913

NAME

StyleSpec - set display style of spectra

SYNOPSIS

StyleSpec (invisible | grid | surface | contour)

DESCRIPTION

Set the display style of all selected spectra.

EXAMPLE

StyleSpec contour

SEE ALSO

SelectSpec

DATE

960913

NAME

Symmetrize - symmetrize peak list

SYNOPSIS

Symmetrize expr expr expr

DESCRIPTION

Modify the quality setting of the peaks of all selected spectra depending on the symmetry of the peak list.

The first two arguments give the two domains that are used for calculating the symmetric position of a peak, these are normally 0 and 1.

The last argument gives the maximal distance allowed from the perfectly symmetric position for a pair of peaks to be considered symmetric.

EXAMPLE

Symmetrize 0 1 0.01

SEE ALSO

SelectSpec, Identify, Deconv

DATE

960913

NAME

System - execute operating system command

SYNOPSIS

System string

DESCRIPTION

Pass the command given as argument for execution by the operating system. Since MOLMOL is currently only running on UNIX, this will generally be a UNIX command.

EXAMPLE

System 'lp tt.ps'

DATE

960913

NAME

TextureSpec - set texture of spectra
TexturePeak - set texture of peaks
TexturePrim - set texture of primitives

SYNOPSIS

```
TextureSpec string expr expr expr  
TexturePeak string expr expr expr  
TexturePrim string expr expr expr
```

DESCRIPTION

Set the texture mapping parameters of all selected spectra, peaks or primitives. The first parameter gives the name of a texture, the second parameter its scaling factor.

The third parameter determines the amount of bumpiness of the surface. 0.0 results in a smooth surface, 1.0 in a very bumpy surface. The fourth parameter is a scaling factor for the bump pattern, a larger scaling factor will result in wider bumps.

Texture mapping is not supported on screen, these parameters are used for preparing files for ray-tracing (PlotPov).

The texture name must appear in the texture definition file of POV-Ray (textures.inc). If a texture is selected, the attributes of this texture will override the colors and material properties selected otherwise. If the name has the extension ".gif", it is assumed to be the name of a GIF file which is used as image map.

Giving a value of 'as is' for the texture name or less than 0.0 for any numerical argument will not change it, this is useful for changing only part of the parameters.

EXAMPLES

```
TextureSpec 'Blood_Marble' 0.5 0.0 1.0  
TexturePeak '' 1.0 0.5 1.0
```

SEE ALSO

Select*, Color*, Material*, PlotPov

DATE

960913

NAME

UndefProp - undefine property

SYNOPSIS

UndefProp propertyName

DESCRIPTION

Undefine the property with the given name everywhere. This command is rarely used. The program cannot detect if a property is not used anymore. Executing this command with unused properties can help to avoid problems (like unnecessarily large dump files or overflow of internal tables), especially when a lot of different properties are used.

EXAMPLES

UndefProp good

SEE ALSO

DefProp*

DATE

960912

NAME

UserInterface - switch elements of user interface

SYNOPSIS

```
UserInterface ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 )  
              ( 0 | 1 ) ( 0 | 1 ) ( 0 | 1 )
```

DESCRIPTION

Switch various parts of the user interface on or off. The following elements can be switched:

- Valuator Box
- Log Window
- Buttons
- Command Line
- Status Line
- Menubar

The program makes sure that Command Line and Menubar are not switched off at the same time, because this would make it impossible to enter any more commands.

EXAMPLE

```
UserInterface 0 0 1 1 1 1
```

DATE

960913

NAME

ViewAngle - set view angle

SYNOPSIS

ViewAngle expr

DESCRIPTION

Set the view angle. For orthogonal projection, this influences only the size (zooming factor) of the display, for perspective projection, a larger view angle leads to a stronger perspective. The value is given in radians.

EXAMPLE

ViewAngle 0.5

SEE ALSO

Projection, ClipPos, ClipSize

DATE

960913

NAME

WritePeak - write peak list

SYNOPSIS

WritePeak fileName

DESCRIPTION

Write all currently selected peaks to a peak list. The format corresponds to the one used by the latest version of XEASY.

EXAMPLE

WritePeak /home/joe/easy/autopsy.peaks

SEE ALSO

SelectPeak

DATE

960913

NAME

WriteRotation - write current rotation

SYNOPSIS

WriteRotation fileName

DESCRIPTION

Write the current rotation of the first selected spectrum to a macro file. Executing this macro with XMacUser will restore the orientation. At least one spectrum must be selected.

EXAMPLE

WriteRotation /home/joe/macros/rotate.mac

SEE ALSO

XMacUser, RotateInit, RotateX, RotateY, RotateZ

DATE

960913

NAME

XMacStand - execute standard macro
XMacUser - execute user macro

SYNOPSIS

XMacStand fileName
XMacUser fileName

DESCRIPTION

Execute a macro file. A macro file is a sequence of commands like they are entered on the command line. A history of all executed commands of each session is maintained in the file molmol/history in the users home directory. It can be used as macro.

The two commands only differ in their search path. XMacStand by default searches in \$MOLMOLHOME/macros, while XMacUser uses the current directory as default search path.

Additionally to regular commands, macros can also contain command definitions. Once a macro with a command definition is read in, this command can be used like a builtin MOLMOL command. A command definition has the syntax:

```
define CommandName
  help one-line-help
  $arg1 = default1 prompt1
  ..
  $argN = defaultN promptN
  Command1
  ..
  CommandN
end
```

The help line is optional. The command can have any number of arguments (including zero). If no default value is given, the empty string is assumed the first time the command is executed, the previous value from there on. If the prompt is missing, the name of the argument is taken. If default values or prompts contain blanks or other special characters, they have to be written in single or double quotes.

At least one command must be present in the body. Empty lines and comments (starting with #) are allowed, the lines can be indented for better readability.

In the body, the arguments can be referenced by \$arg or \${arg}. Any command can be used.

Example:

```
define ZoomRotate
  help zoom and rotate in one step
```

```
$Zoom = 1.5
$rotY = 90 "Rotate Y"

ZoomRel $Zoom
RotateY $rotY
end
```

EXAMPLE

```
XMacUser /home/joe/macros/my_favorite.mac
```

DATE

```
960913
```

NAME

ZoomAbs - zoom absolute
ZoomRel - zoom relative

SYNOPSIS

ZoomAbs expr
ZoomRel expr

DESCRIPTION

Enlarge/reduce the size of the display. ZoomRel changes the size by a given factor, relative to the current size. Factors greater than 1 make the display larger, factors less than 1 make it smaller. ZoomAbs sets the zoom factor to an absolute value.

ZoomAbs, in conjunction with PlotPar, can be used to produce different plots with the same scale. If the zoom factor and the plot size are set to the same values, the scales will be identical.

Zooming is normally done interactively by pressing the left and the middle mouse button.

EXAMPLES

ZoomAbs 0.2
ZoomRel 1.4

SEE ALSO

PlotPar

DATE

960912

