

limmaGUI

March 24, 2012

LGchangeLog

LimmaGUI Change Log

Description

Write as text the most recent changes from the limmaGUI package changelog.

Usage

LGchangeLog (n=20)

Arguments

n integer, number of lines to write of changelog.

Value

No value is produced, but a number of lines of text are written to standard output.

Author(s)

Gordon Smyth

limmaGUI

Graphical User Interface for the limma microarray package

Description

Graphical User Interface for the limma microarray package

Usage

```

AboutLimmaGUI()
AboutNormalization()
BChelp()
ChooseContrastsParameterization(parameterizationTreeIndex)
ChooseEbayesStatistic()
ChooseParameterization()
ChoosePlotSymbolByClicking(spotType, cex)
ChooseSpotType(parameterizationTreeIndex)
ComputeContrasts()
CopyGraph(img)
CreateNewParameterization()
DeleteContrastsParameterization()
deleteItemFromList(list1, itemName = NULL, index = NULL)
DeleteParameterization()
DupCorBoxPlot()
ebayesBoxPlots()
evalRcode()
ExportHTMLreport()
ExportTopTable()
fixSeps(string)
GetBackgroundCorrectionMethod()
GetBetweenArrayNormalizationMethod()
GetCoef(parameterizationTreeIndex, whichCoef = "onlyOne")
GetComponentsToExportInHTMLreport(parameterizationIndex = NULL)
GetContrastsParameterizationName()
GetContrastsParameterizationNames(parameterizationTreeIndex)
GetDEcutoff()
GetDesignOrContrasts(Design = FALSE, Contrasts = FALSE, NumContrasts = 0,
                      parameterizationIndex = 0)
GetGeneLabelsOptions()
GetImageAnalysisColumnHeadings()
GetImageProcessingFileType()
GetJpegOrPngParams(graphFileType)
GetJpegOrPngX11Params(graphFileType)
GetlimmaDataSetName()
GetlmFitMethod()
GetLowessType()
GetNEWxlim(xlim)
GetNormexpOffsetValue(CurrentNormexpOffsetValue)
GetNumParametersNoTargets()
getPackageVersion(pkgName)
GetParameterizationName()
GetParameterNames(parameterizationTreeIndex)
GetParametersAndOrContrasts(parameterizationTreeIndex, whatFor = "heat")
GetPlotLabels(plottitle = "", xlabel = "", ylabel = "")
GetPlotSize()
GetPlotTitle(plottitle = "")
GetPValueCutoff(p.value = 0.01)
GetReducedDuplicateSpacing(parameterizationTreeIndex)
GetRNATypesFrom.ContrastsFromDropDowns.String(string)
GetSlideNum()

```

```
GetSpotTypesForLinearModel()
GetSpotTypesIncludedNames(parameterizationTreeIndex)
GetWithinArrayNormalizationMethod()
GetWtAreaParams()
HeatDiagramDialog(parameterName)
HeatDiagramPlot()
HowManyDups()
HTMLplotUsingFunction(Caption = "", File = .HTML.file,
                       GraphRelativeDirectory = ".", GraphAbsoluteDirectory =
                       NULL, GraphFileName = "", GraphSaveAs = "png",
                       GraphBorder = 1, Align = "center", plotFunction =
                       NULL, Width = 600, Height = 600, PointSize = 12,
                       BG = "white", res = 72, ...)
ImageArrayPlot()
ImageArrayPlotDialog(slidenum)
ImportMA()
ImportMADialog()
initGlobals()
InitNewParameterization()
limmaGUI(BigfontsForlimmaGUIpresentation = FALSE)
limmaHelp()
limmaUsersGuide(view = TRUE)
lmFitMethodHelp()
LogOddsPlot()
MAPlot()
MAPlotAvg()
MBoxPlot()
MMPlot()
NewLimmaFile()
NormalizeNow()
nstrstr(haystack, needle)
onDestroy()
onExit()
OpenALimmaFile(FileName)
OpenGALandTargetsandSpotTypesfiles()
OpenGALFile()
OpenLimmaFile()
OpenSpotTypesFile()
OpenTargetsFile()
plotMAColorCoded()
PlotOptions()
PrintTipGroupMAPlot()
QQTplot()
read.marrayTools(MFile,AFile, path, verbose, sep, quote, header, ...)
ReadImageProcessingFiles()
Require(pkg)
Resize(img, plotFunction)
SaveAsLimmaFile()
SaveGraphAsJpeg(initialfile, plotFunction)
SaveGraphAsPDF(initialfile, plotFunction)
SaveGraphAsPNG(initialfile, plotFunction)
SaveGraphAsPostscript(initialfile, plotFunction)
```

```

SaveLimmaFile()
SelectPlotSymbols(SpotTypes)
SetLayoutParameters()
SetupPlotKeyBindings(tt, img)
SetupPlotMenus(tt, initialfile, plotFunction, img)
SetWD()
showChangeLog()
showCitations()
showGAL()
showTopTable(..., export = FALSE)
SimplifyContrastsExpression(string)
strstr(haystack, needle)
tclArrayVar()
TclRequire(tclPkg)
TryReadImgProcFile(expr)
UpdateSpotTypesStatus()
UpDownOrBoth()
VennDiagramPlot()
ViewDesignOrContrastsMatrixAsPairs(DesignOrContrasts, designOrContrastsList,
    parameterizationIndex, contrastsParameterizationIndex
    = NULL)
ViewDesignOrContrastsMatrixInTable(DesignOrContrasts, designOrContrastsList,
    parameterizationIndex, contrastsParameterizationIndex
    = NULL)
ViewExistingContrastsParameterization()
ViewExistingParameterization()
ViewRNATargets()
ViewSpotTypes()

```

Arguments

```

BigfontsForlimmaGUIpresentation
    If set to TRUE, larger fonts are used. However, some font sizes are not controlled by limmaGUI and so must be adjusted in the operating system, e.g. in the Control Panel in Windows under Display, Appearance.
...
HTMLplotUsingFunction:arg15, showTopTable:arg1
AFile
    Flat-file of log-intensities output by marrayTools
Align
    HTMLplotUsingFunction:arg8
BG
    HTMLplotUsingFunction:arg13
Caption
    HTMLplotUsingFunction:arg1
cex
    ChoosePlotSymbolByClicking:arg2
contrastsParameterizationIndex
    ViewDesignOrContrastsMatrixInTable:arg4, ViewDesignOrContrastsMatrixAsPairs:arg4
Contrasts
    GetDesignOrContrasts:arg2
CurrentNormexpOffsetValue
    GetNormexpOffsetValue:arg1
designOrContrastsList
    ViewDesignOrContrastsMatrixInTable:arg2, ViewDesignOrContrastsMatrixAsPairs:arg2

```

DesignOrContrasts ViewDesignOrContrastsMatrixInTable:arg1, ViewDesignOrContrastsMatrixAsPairs:arg1
 Design GetDesignOrContrasts:arg1
 export showTopTable:arg2
 expr TryReadImgProcFile:arg1
 FileName A file name.
 File HTMLplotUsingFunction:arg2
 GraphAbsoluteDirectory HTMLplotUsingFunction:arg4
 GraphBorder HTMLplotUsingFunction:arg7
 GraphFileName HTMLplotUsingFunction:arg5
 graphFileType GetJpegOrPngParams:arg1, GetJpegOrPngX11Params:arg1
 GraphRelativeDirectory HTMLplotUsingFunction:arg3
 GraphSaveAs HTMLplotUsingFunction:arg6
 haystack nstrstr:arg1, strstr:arg1
 header See help for read.table
 Height HTMLplotUsingFunction:arg11
 img SetupPlotMenus:arg1, Resize:arg1, CopyGraph:arg1, SetupPlotKeyBindings:arg2
 index deleteItemFromList:arg1
 initialfile SaveGraphAsJpeg:arg1, SaveGraphAsPDF:arg1, SaveGraphAsPNG:arg1, SaveGraphAsPostscript:arg1, SetupPlotMenus:arg2
 itemName deleteItemFromList:arg1
 list1 deleteItemFromList:arg1
 MFile Flat-file of log-ratios output by marrayTools
 needle nstrstr:arg2, strstr:arg2
 NumContrasts GetDesignOrContrasts:arg3
 p.value A p-value cutoff.
 parameterizationIndex GetDesignOrContrasts:arg4, GetComponentsToExportInHTMLreport:arg1, GetDesignOrContrasts:arg4, ViewDesignOrContrastsMatrixInTable:arg3, ViewDesignOrContrastsMatrixAsPairs:arg3
 parameterizationTreeIndex GetParametersAndOrContrasts:arg1, ChooseContrastsParameterization:arg1, ChooseSpotType:arg1, GetCoef:arg1, GetParameterNames:arg1, GetReducedDuplicateSpacing:arg1, GetContrastsParameterizationNames:arg1, GetSpotTypesIncludedNames:arg1
 parameterName HeatDiagramDialog:arg1
 path Path to the directory containing the MFile and AFile
 pkgName getPackageVersion:arg1
 pkg Require:arg1

plotFunction	SetupPlotMenus:arg1, HTMLplotUsingFunction:arg9, Resize:arg1, SaveGraphAsJpeg:arg2, SaveGraphAsPDF:arg2, SaveGraphAsPNG:arg2, SaveGraphAsPostscript:arg2
plottitle	GetPlotLabels:arg1, GetPlotTitle:arg1
PointSize	HTMLplotUsingFunction:arg12
quote	See help for read.table
res	HTMLplotUsingFunction:arg14
sep	Column separator. ("\t" for tab-delimited text)
slidenum	ImageArrayPlotDialog:arg1
spotType	ChoosePlotSymbolByClicking:arg1
SpotTypes	SelectPlotSymbols:arg1
string	fixSeps:arg1, SimplifyContrastsExpression:arg1, GetRNATypesFrom.ContrastsFromDropDowns.Stri
tclPkg	TclRequire:arg1
tt	SetupPlotKeyBindings:arg1, SetupPlotMenus:arg1
verbose	Optional diagnostic messages
view	limmaUsersGuide:arg1
whatFor	GetParametersAndOrContrasts:arg2
whichCoef	GetCoef:arg2
Width	HTMLplotUsingFunction:arg10
xlabel	GetPlotLabels:arg2
xlim	GetNEWxlim:arg1
ylabel	GetPlotLabels:arg3

Details

This function launches a Graphical User Interface for the limma package by Gordon Smyth. The GUI uses Tk widgets (via the R TclTk interface by Peter Dalgaard) in order to provide a simple interface to the limma functions for linear modelling of microarrays and identification of differentially expressed genes.

Author(s)

James Wettenhall

Index

*Topic IO

limmaGUI, 1

*Topic documentation

LGchangeLog, 1

AboutLimmaGUI (*limmaGUI*), 1

AboutNormalization (*limmaGUI*), 1

BChelp (*limmaGUI*), 1

ChooseContrastsParameterization
(*limmaGUI*), 1

chooseDir (*limmaGUI*), 1

ChooseEbayesStatistic (*limmaGUI*),
1

ChooseParameterization
(*limmaGUI*), 1

ChoosePlotSymbolByClicking
(*limmaGUI*), 1

ChooseSpotType (*limmaGUI*), 1

ComputeContrasts (*limmaGUI*), 1

ComputeLinearModelFit (*limmaGUI*),
1

CopyGraph (*limmaGUI*), 1

CreateNewParameterization
(*limmaGUI*), 1

CreateTreeAndList (*limmaGUI*), 1

DeleteContrastsParameterization
(*limmaGUI*), 1

deleteItemFromList (*limmaGUI*), 1

DeleteParameterization
(*limmaGUI*), 1

DupCorBoxPlot (*limmaGUI*), 1

ebayesBoxPlots (*limmaGUI*), 1

evalRcode (*limmaGUI*), 1

ExportAvalues (*limmaGUI*), 1

ExportHTMLreport (*limmaGUI*), 1

ExportMvalues (*limmaGUI*), 1

ExportTopTable (*limmaGUI*), 1

fixSeps (*limmaGUI*), 1

GetBackgroundCorrectionMethod
(*limmaGUI*), 1

GetBetweenArrayNormalizationMethod
(*limmaGUI*), 1

GetCoef (*limmaGUI*), 1

GetComponentsToExportInHTMLreport
(*limmaGUI*), 1

GetContrastsParameterizationName
(*limmaGUI*), 1

GetContrastsParameterizationNames
(*limmaGUI*), 1

GetDEcutoff (*limmaGUI*), 1

GetDesignOrContrasts (*limmaGUI*), 1

GetGeneLabelsOptions (*limmaGUI*), 1

GetGenePixFlagWeightings
(*limmaGUI*), 1

GetImageAnalysisColumnHeadings
(*limmaGUI*), 1

GetImageProcessingFileType
(*limmaGUI*), 1

GetJpegOrPngParams (*limmaGUI*), 1

GetJpegOrPngX11Params (*limmaGUI*),
1

GetlimmaDataSetName (*limmaGUI*), 1

GetlmFitMethod (*limmaGUI*), 1

GetLowessType (*limmaGUI*), 1

GetNEWxlim (*limmaGUI*), 1

GetNormexpOffsetValue (*limmaGUI*),
1

GetNumParametersNoTargets
(*limmaGUI*), 1

getPackageVersion (*limmaGUI*), 1

GetParameterizationName
(*limmaGUI*), 1

GetParameterNames (*limmaGUI*), 1

GetParametersAndOrContrasts
(*limmaGUI*), 1

GetPlotLabels (*limmaGUI*), 1

GetPlotSize (*limmaGUI*), 1

GetPlotTitle (*limmaGUI*), 1

GetPValueCutoff (*limmaGUI*), 1

GetReducedDuplicateSpacing
(*limmaGUI*), 1

GetRNATypesFrom.ContrastsFromDropDowns.String
(*limmaGUI*), 1

- GetSlideNum (*limmaGUI*), 1
- GetSpotTypesForLinearModel (*limmaGUI*), 1
- GetSpotTypesIncludedNames (*limmaGUI*), 1
- GetWithinArrayNormalizationMethod (*limmaGUI*), 1
- GetWtAreaParams (*limmaGUI*), 1

- HeatDiagramDialog (*limmaGUI*), 1
- HeatDiagramPlot (*limmaGUI*), 1
- HowManyDups (*limmaGUI*), 1
- HTMLplotUsingFunction (*limmaGUI*), 1

- ImageArrayPlot (*limmaGUI*), 1
- ImageArrayPlotDialog (*limmaGUI*), 1
- imageplotlimmaGUI (*limmaGUI*), 1
- ImportMA (*limmaGUI*), 1
- ImportMADialog (*limmaGUI*), 1
- initGlobals (*limmaGUI*), 1
- InitNewParameterization (*limmaGUI*), 1

- LGchangeLog, 1
- limmaGUI, 1
- limmaGUIhelp (*limmaGUI*), 1
- limmaHelp (*limmaGUI*), 1
- limmaUsersGuide (*limmaGUI*), 1
- lmFitMethodHelp (*limmaGUI*), 1
- LogOddsPlot (*limmaGUI*), 1

- MAPlot (*limmaGUI*), 1
- MAPlotAvg (*limmaGUI*), 1
- MBoxPlot (*limmaGUI*), 1
- MMPlot (*limmaGUI*), 1

- NewLimmaFile (*limmaGUI*), 1
- NormalizeNow (*limmaGUI*), 1
- nstrstr (*limmaGUI*), 1

- onDestroy (*limmaGUI*), 1
- onExit (*limmaGUI*), 1
- OpenALimmaFile (*limmaGUI*), 1
- OpenGALandTargetsandSpotTypesfiles (*limmaGUI*), 1
- OpenGALFile (*limmaGUI*), 1
- OpenLimmaFile (*limmaGUI*), 1
- OpenSpotTypesFile (*limmaGUI*), 1
- OpenTargetsFile (*limmaGUI*), 1

- plotMAColorCoded (*limmaGUI*), 1
- PlotOptions (*limmaGUI*), 1
- PrintTipGroupMAPlot (*limmaGUI*), 1

- QQTplot (*limmaGUI*), 1

- read.marrayTools (*limmaGUI*), 1
- readGALLimmaGUI (*limmaGUI*), 1
- ReadImageProcessingFiles (*limmaGUI*), 1
- Require (*limmaGUI*), 1
- Resize (*limmaGUI*), 1

- SaveAsLimmaFile (*limmaGUI*), 1
- SaveGraphAsJpeg (*limmaGUI*), 1
- SaveGraphAsPDF (*limmaGUI*), 1
- SaveGraphAsPNG (*limmaGUI*), 1
- SaveGraphAsPostscript (*limmaGUI*), 1
- SaveLimmaFile (*limmaGUI*), 1
- SelectPlotSymbols (*limmaGUI*), 1
- SetLayoutParameters (*limmaGUI*), 1
- SetupPlotKeyBindings (*limmaGUI*), 1
- SetupPlotMenus (*limmaGUI*), 1
- SetWD (*limmaGUI*), 1
- showChangeLog (*limmaGUI*), 1
- showCitations (*limmaGUI*), 1
- showGAL (*limmaGUI*), 1
- showTopTable (*limmaGUI*), 1
- SimplifyContrastsExpression (*limmaGUI*), 1
- strstr (*limmaGUI*), 1

- tclArrayVar (*limmaGUI*), 1
- TclRequire (*limmaGUI*), 1
- Try (*limmaGUI*), 1
- TryReadImgProcFile (*limmaGUI*), 1

- UpdateSpotTypesStatus (*limmaGUI*), 1
- UpDownOrBoth (*limmaGUI*), 1

- vennDiagramlimmaGUI (*limmaGUI*), 1
- VennDiagramPlot (*limmaGUI*), 1
- ViewDesignOrContrastsMatrixAsPairs (*limmaGUI*), 1
- ViewDesignOrContrastsMatrixInTable (*limmaGUI*), 1
- ViewExistingContrastsParameterization (*limmaGUI*), 1
- ViewExistingParameterization (*limmaGUI*), 1
- ViewRNATargets (*limmaGUI*), 1
- ViewSpotTypes (*limmaGUI*), 1

- WithinBetweenOrBoth (*limmaGUI*), 1
- wtflags2 (*limmaGUI*), 1