Package 'aidar'

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Title Tools for Reading AIDA Files

Description Read objects from the AIDA (<http://aida.freehep.org/>) file and make them available as dataframes in R.

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Suggests testthat

Imports XML

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NeedsCompilation no

Repository CRAN

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R topics documented:

`getAnnotation` *retrieves the annotation of a given AIDA object by it's name from the given file*

Description

retrieves the annotation of a given AIDA object by it's name from the given file

Usage

```
getAnnotation(fileName, objectName)
```

Arguments

`fileName`	name of the AIDA file
`objectName`	name of the AIDA object for which the annotation is to be found

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
ann = getAnnotation(histoFile, '21')
```

`getCloud1D` *retrieves a given 1D cloud by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 1D cloud by it's name from the given file and returns it as a data.frame

Usage

```
getCloud1D(fileName, cloudName)
```

Arguments

`fileName`	name of the AIDA file
`cloudName`	name of the AIDA 1D cloud to be returned

Examples

```
histoFile = system.file("extdata", "clouds.xml.gz", package="aidar")
c1d = getCloud1D(histoFile, '21')
```

`getCloud2D` *retrieves a given 2D cloud by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 2D cloud by it's name from the given file and returns it as a data.frame

Usage

```
getCloud2D(fileName, cloudName)
```

Arguments

`fileName`	name of the AIDA file
`cloudName`	name of the AIDA 2D cloud to be returned

Examples

```
histoFile = system.file("extdata", "clouds.xml.gz", package="aidar")
c2d = getCloud2D(histoFile, '30')
```

`getCloud3D` *retrieves a given 3D cloud by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 3D cloud by it's name from the given file and returns it as a data.frame

Usage

```
getCloud3D(fileName, cloudName)
```

Arguments

`fileName`	name of the AIDA file
`cloudName`	name of the AIDA 3D cloud to be returned

Examples

```
histoFile = system.file("extdata", "clouds.xml.gz", package="aidar")
c3d = getCloud3D(histoFile, '33')
```

`getFileInfo` *lists the content of a given AIDA file.*

Description

This function lists the context of a given AIDA file. The AIDA file should have been written out in "uncompressed" format which subsequently can be gzip compressed.

Usage

```
getFileInfo(fileName)
```

Arguments

`fileName`	name of the AIDA file

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
info = getFileInfo(histoFile)
```

`getHisto1D` *retrieves a given 1D histogram by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 1D histogram by it's name from the given file and returns it as a data.frame

Usage

```
getHisto1D(fileName, histoName)
```

Arguments

`fileName`	name of the AIDA file
`histoName`	name of the AIDA 1D histogram to be returned as a data.frame

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
h1 = getHisto1D(histoFile, '1')
```

`getHisto2D` *retrieves a given 2D histogram by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 2D histogram by it's name from the given file and returns it as a data.frame

Usage

```
getHisto2D(fileName, histoName)
```

Arguments

`fileName`	name of the AIDA file
`histoName`	name of the AIDA 2D histogram to be returned as a data.frame

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
h2 = getHisto2D(histoFile, '10')
```

`getHisto3D` *retrieves a given 3D histogram by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 3D histogram by it's name from the given file and returns it as a data.frame

Usage

```
getHisto3D(fileName, histoName)
```

Arguments

`fileName`	name of the AIDA file
`histoName`	name of the AIDA 3D histogram to be returned as a data.frame

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
h3 = getHisto3D(histoFile, '13')
```

`getProfile1D` *retrieves a given 1D profile histogram by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 1D profile histogram by it's name from the given file and returns it as a data.frame

Usage

```
getProfile1D(fileName, histoName)
```

Arguments

`fileName`	name of the AIDA file
`histoName`	name of the AIDA 1D profile histogram to be returned

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
p1d = getProfile1D(histoFile, 'Example profile (gauss)')
```

`getProfile2D` *retrieves a given 2D profile histogram by it's name from the given file and returns it as a data.frame*

Description

retrieves a given 2D profile histogram by it's name from the given file and returns it as a data.frame

Usage

```
getProfile2D(fileName, histoName)
```

Arguments

`fileName`	name of the AIDA file
`histoName`	name of the AIDA 2D profile histogram to be returned

Examples

```
histoFile = system.file("extdata", "histos.xml.gz", package="aidar")
p2d = getProfile2D(histoFile, 'Example 2D profile (gauss)')
```

getTuple *retrieves a given tuple by it's name from the given file and returns it as a data.frame*

Description

retrieves a given tuple by it's name from the given file and returns it as a data.frame

Usage

```
getTuple(fileName, tupName)
```

Arguments

fileName	name of the AIDA file
tupName	name of the AIDA tuple to be returned

Examples

```
tupleFile = system.file("extdata", "tuple.xml.gz", package="aidar")
t100 = getTuple(tupleFile, '100')
```

Index