

opendduction.sty

Willem Heijltjes

Version 2 | 17 July 2018

The package provides a single command,

```
drv[<options>]{ <formula> ; <rule> ; <formula> ; ... ; <rule> ; <formula> }
```

which creates an open-deduction derivation from top to bottom. A `<formula>` is any reasonable `\TeX` construct and may in particular contain further derivations. A `<rule>` is a triple of: an optional left label; a rule or derivation symbol; an optional right label. Labels can be anything.

```
<rule> ::= [<left label>] <rule kind> [<right label>]
```

The `<rule kind>` is indicated with a single symbol, according to the table below. The package will attempt to typeset any other `\TeX` commands given for `<rule kind>` in the appropriate location.

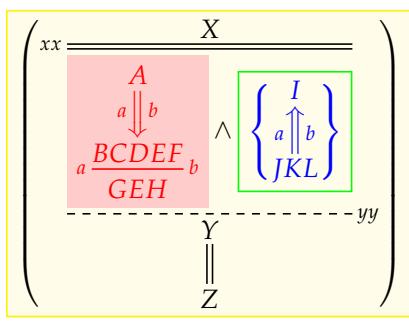
<code><rule kind></code>	<code>::=</code>	- single rule
		= double rule
		. dashed rule
		double vertical rule
		^ double arrow up
		_ double arrow down

The `<options>` are given by a comma-separated list of `<key=value>` pairs. These keys are supported:

<code>text = <color></code>	sets the color of the derivation
<code>border = <color></code>	creates a box with colored border
<code>background = <color></code>	creates a box with colored background
<code><color></code>	shortcut for: <code>border=<color>, background=<color>!10</code>
<code>braces = <curly round square></code>	adds curly/round/square braces <code>{...}/(..)/[..]</code>

Braces will be inside the box and in the color of `<text=...>`. With no value given, the default is square.

Example



```
\drv[braces=round,yellow]{
  X ; [xx]= ;
  \drv[text=red,background=red!20]{
    A ; [a]_[b] ; BCDEF ; [a]-[b] ; GEH
  }
  \wedge
  \drv[text=blue,border=green,braces=curly]{
    I ; [a] ^ [b] ; JKL
  }
  ; .[yy] ; Y ; | ; Z
}
```