

The `harveyballs` Package

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Abstract

This document exemplifies the `harveyballs` package for L^AT_EX 2_ε in a nutshell. Harvey balls can be used in arbitrary contexts such as to present survey results in a visual manner or express parameter values of certain characteristics. They provide a visual means to easily compare these values best facilitated by the sophisticated pattern recognition techniques of build in visual human cognition by mother nature.

1 Package Dependencies

The `harveyballs` package requires the `tikz` package.

2 Examples and Options

2.1 In text

This is a normal text with Harvey Balls included. Here is a value commonly indicating a property is not fulfilled \circ . For partially fulfilled properties you could use a Harvey Ball filled by a quarter, e.g. \ominus . If it is half fulfilled, you could use \bullet . Almost fulfilled properties could be illustrated with \ominus . Finally, if a certain property is fulfilled entirely you should use \bullet .

2.2 In table

Harvey Balls can also be integrated in tables (cf. Table 1).

	Approach 1	Approach 2	Approach 3
Property 1	\circ	\ominus	\bullet
Property 2	\bullet	\ominus	\bullet
Property 3	\bullet	\ominus	\bullet

Table 1: Example for a table including Harvey Balls

2.3 Custom size

There are two variables available to the user to override the size of the Harvey Balls globally.

- `\harveyBallsSize`, i.e. the size of the Harvey Balls and
- `\harveyBallsLineWidth`, i.e. the line width used to draw the Harvey Balls.

These values can be changed using the following commands:

- `\def\harveyBallsSize{0.85ex}`
- `\def\harveyBallsLineWidth{0.2pt}`

Whereas `0.85ex` and `0.2pt` would be parameters, i.e. your custom sizes. Note that these are also the default values. `\def\harveyBallsLineWidth{1pt}` and `\def\harveyBallsSize{3ex}` produces:



You can also use custom sized using an optional parameter for each Harvey Ball

Command	Produced Harvey Ball
<code>\harveyBallNone[14pt]</code>	
<code>\harveyBallQuarter[14pt]</code>	
<code>\harveyBallHalf[14pt]</code>	
<code>\harveyBallThreeQuarter[14pt]</code>	
<code>\harveyBallFull[14pt]</code>	

Table 2: Example for custom-sized Harvey Balls

2.4 Custom Colors

The colors of the Havey Balls can be overridden utilizing the user variables

- `\harveyBallsColor`, i.e. the fill color of the Harvey Ball and
- `\harveyBallsLineColor`, i.e. the border color of the Harvey Ball.

For instance with `\def\harveyBallsColor{red}` and `\def\harveyBallsLineColor{blue}` you Harvey Balls will appear like this:



3 Changelog

Date	Version	Changes
2013/10/26	Version 1.1	Added user variables for fill and border colors, custom sizes and improved visual appearance. Thanks to Daniel H. Luecking from University of Arkansas for the valuable feedback to the initial version and suggestions for improvements
2013/10/22	Version 1.0	Initial release.

4 License

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