The \texttt{dynbrackets} package

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1 Introduction

This package simplifies the syntax of calling dynamic math brackets. Dynamic math brackets builds on $\left$ and $\right$ syntax of deploying size sensible brackets in math mode.

2 Usage

\texttt{dynbrackets} implements commands to the math braces and parentheses found in Table 1. Note that L\TeX\ markup on the table doesn’t correspond to dynamic brackets, just the brackets themselves.

To have the brackets change size dynamically with the content one would have to use $\left$ and $\right$ on each bracket respectively. To simplify the syntax, \texttt{dynbrackets} implements a command for each bracket pair. When calling a dynamic bracket, content inside the bracket will automatically be in math mode.

3 Implementation

1 \texttt{\NeedsTeXFormat{LaTeX2e}}
2 \texttt{\ProvidesPackage{dynbrackets}}

Table 1: List of Math Brackets

<table>
<thead>
<tr>
<th>Type</th>
<th>\LaTeX</th>
<th>dynbrackets</th>
<th>Renders as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parentheses; round brackets</td>
<td>( x+y )</td>
<td>\dbr{}</td>
<td>(x + y)</td>
</tr>
<tr>
<td>Brackets; square brackets</td>
<td>[ x+y ]</td>
<td>\dbs{}</td>
<td>[x + y]</td>
</tr>
<tr>
<td>Braces; curly brackets</td>
<td>{ x+y}</td>
<td>\dbc{}</td>
<td>{x + y}</td>
</tr>
<tr>
<td>Angle brackets</td>
<td>$\langle x+y \rangle$</td>
<td>\dba{}</td>
<td>$\langle x + y \rangle$</td>
</tr>
<tr>
<td>Pipes; vertical bars</td>
<td></td>
<td>\dbp{}</td>
<td></td>
</tr>
<tr>
<td>Double pipes</td>
<td>$| x+y |$</td>
<td>\dbdp{}</td>
<td>$| x + y |$</td>
</tr>
</tbody>
</table>
3 [2021/04/01 v1.0.0 Simplifies the syntax of calling dynamic math brackets]
\dbr
4 \newcommand{\dbr}[1]{\ensuremath{\left(#1\right)}}
\dbs
5 \newcommand{\dbs}[1]{\ensuremath{\left[#1\right]}}
\dbc
6 \newcommand{\dbc}[1]{\ensuremath{\left\{#1\right\}}}  
\dba
7 \newcommand{\dba}[1]{\ensuremath{\left\langle#1\right\rangle}}
\dbp
8 \newcommand{\dbp}[1]{\ensuremath{\left|#1\right|}}
\dbdp
9 \newcommand{\dbdp}[1]{\ensuremath{\left\||1\right|}}