

The sidenotes package*

Andy Thomas
andythomas(at)web.de

Oliver Schebaum

January 22, 2014

Abstract

This package tries to allow the typesetting of rich content in the margin. This includes text, but also figures, captions, tables and citations. This is common in science textbooks such as Feynman's *Lectures on Physics*.

Contents

1	Usage	1
2	Technical note	2
3	Required packages	2
4	Implementation	2

1 Usage

<code>\sidenote</code>	The macro is very similar to the footnote macro and tries to emulate its behavior. But like the name says, the note is put in the margin, hence the name sidenote. It has the same parameters as footnote, plus an additional offset: <code>\sidenote[number][offset]{text}</code> . The sidenote moves up or down (floats) to not overlap with other floats in the margin if no offset is given. and all the sidenotes are subsequently numbered. The first, optional parameter will manually change the numbering. The sidenote will be fixed at a particular position in the margin if the offset parameter is used.
<code>\sidenotemark</code>	Sidenote tries to mimic the footnote behavior and tries to provide the same solutions. Sometimes it is not possible to directly call a sidenote macro, e.g. in particular environments. Then, you can also use <code>\sidenotemark[number]</code> and <code>\sidenotetext[number][offset]{text}</code> commands. <code>\sidenotemark</code> puts a mark at the current position. Then, outside of the environment that causes the
<code>\sidenotetext</code>	

*This document corresponds to sidenotes v0.93, dated 2012/04/07.


```

1 \newcounter{sidenote} % make counter
2 \newcounter{@sidenotes@buffer}
3 \setcounter{sidenote}{1} % init counter

4 \def\@sidenotes@ifnextchar#1#2#3{%
5 \let\@sidenotes@buffere #1\def\@sidenotes@buffera{#2}%
6 \def\@sidenotes@bufferb{#3}\futurelet\@sidenotes@bufferc\@sidenotes@ifnextchar@real}%
7 \def\@sidenotes@ifnextchar@real{%
8 \ifx\@sidenotes@bufferc \@sidenotes@buffere \let\@sidenotes@bufferd\@sidenotes@buffera%
9 \else\let\@sidenotes@bufferd\@sidenotes@bufferb\fi\@sidenotes@bufferd}%

\sidenote Introduce the sidenote macro with an additional optional argument to set the
offset.

10 \newcommandtwoopt{\sidenote}[3] [] []{%
11 \sidenotemark[#1]%
12 \sidenotetext[#1][#2]{#3}%
13 \@sidenotes@ifnextchar\sidenote{\kern-0.07em\textsuperscript{,}}}%
14 {\@sidenotes@ifnextchar\sidcite{\kern-0.07em\textsuperscript{,}}{}}}%
15 }

\sidenotemark Sidenotemark is supposed to work similarly to footnotemark.

16 \newcommand{\sidenotemark}[1] []{%
17 \nobreak\hspace{0.1pt}\nobreak%
18 \ifthenelse{\isempty{#1}}{%
19 {\textsuperscript{\thesidenote}}%
20 \refstepcounter{sidenote}}% if no argument is given use sidenote counter%
21 {\setcounter{@sidenotes@buffer}{\value{sidenote}}}%
22 \setcounter{sidenote}{#1}%
23 \textsuperscript{\thesidenote}% print out the argument otherwise
24 \setcounter{sidenote}{\value{@sidenotes@buffer}}}%
25 \@sidenotes@ifnextchar\sidenote{\textsuperscript{,}}{}}}%
26 \ignorespaces%
27 }%

\sidenotetext Sidenotetext is supposed to work similarly to footnotetext. The additional, op-
tional argument sets the offset.

28 \newcommandtwoopt{\sidenotetext}[3] [] []{%
29 \ifthenelse{\isempty{#1}}{% sidenotemark given?
30 \addtocounter{sidenote}{-1}%
31 \ifthenelse{\isempty{#2}}% offset given?
32 {\marginpar{\textsuperscript{\thesidenote}{ } #3}}}%
33 {\marginnote{\textsuperscript{\thesidenote}{ } #3}[#2]}%
34 \addtocounter{sidenote}{1}}}%
35 {\ifthenelse{\isempty{#2}}% offset given?
36 {\marginpar{\textsuperscript{#1} #3}}}%
37 {\marginnote{\textsuperscript{#1} #3}[#2]}}}%
38 }%

```

`\sidecaption` Sidecaption puts the caption in the margin. It never floats with the other text in the margin, since it has to be next to the figure. Sidecaption* works similarly to sidecaption, but without an entry.

```

39 \DeclareCaptionStyle{sidecaption}{font=footnotesize}
40 \newcommand{\sidecaption}{\@ifstar\@sidenotes@sidecaption@starred\@sidenotes@sidecaption@unstarred}
41 \newcommandtwoopt{\@sidenotes@sidecaption@unstarred}[3] [] []{%
42 \captionsetup{style=sidecaption}%
43 \ifthenelse{\isempty{#2}}{\marginnote{\caption[#1]{#3}}}{\marginnote{\caption[#1]{#3}}[#2]}}%
44 \newcommand{\@sidenotes@sidecaption@starred}[2] []{%
45 \captionsetup{style=sidecaption}%
46 \ifthenelse{\isempty{#1}}{\marginnote{\caption*{#2}}}{\marginnote{\caption*{#2}}[#1]}}%
47 %

```

`marginfigure` The marginfigure is similar to the figure environment. But the figure is put in the margin.

```

48 \newsavebox{\@sidenotes@sidefigurebox}
49 \newboolean{@sidenotes@sidefigure@skip}
50 \newcommand{\@sidenotes@sidefigure@skiplength}{}
51 \DeclareCaptionStyle{marginfigure}{font=footnotesize}
52 \newenvironment{marginfigure}[1] []{%
53 {\ifthenelse{\isempty{#1}}{}% offset?
54 {\setboolean{@sidenotes@sidefigure@skip}{false}}}%
55 {\setboolean{@sidenotes@sidefigure@skip}{true}}%
56 \renewcommand{\@sidenotes@sidefigure@skiplength}{#1}}%
57 \begin{lrbox}{\@sidenotes@sidefigurebox}%
58 \begin{minipage}{\marginparwidth}%
59 \captionsetup{type=figure,style=marginfigure}}%
60 {\end{minipage}%
61 \end{lrbox}}%
62 \ifthenelse{\boolean{@sidenotes@sidefigure@skip}}{}% offset?
63 {\marginnote{\usebox{\@sidenotes@sidefigurebox}}[\@sidenotes@sidefigure@skiplength]}% offset
64 {\marginpar{\usebox{\@sidenotes@sidefigurebox}}}% no offset
65 }

```

`marginable` The sidetable is similar to the table environment. But the table is put in the margin.

```

66 \newsavebox{\@sidenotes@marginablebox}
67 \newboolean{@sidenotes@marginable@skip}
68 \newcommand{\@sidenotes@marginable@skiplength}{}
69 \DeclareCaptionStyle{marginable}{font=footnotesize}
70 \newenvironment{marginable}[1] []{%
71 {\ifthenelse{\isempty{#1}}{}%
72 {\setboolean{@sidenotes@marginable@skip}{false}}}%
73 {\setboolean{@sidenotes@marginable@skip}{true}}%
74 \renewcommand{\@sidenotes@marginable@skiplength}{#1}}%
75 \begin{lrbox}{\@sidenotes@marginablebox}%
76 \begin{minipage}{\marginparwidth}%
77 \captionsetup{type=table,style=marginable}}%
78 {\end{minipage}%

```

```

79 \end{lrbox}%
80 \ifthenelse{\boolean{@sidenotes@marginable@skip}}{%
81 {\marginnote{\usebox{\@sidenotes@marginablebox}}[\@sidenotes@marginable@skiplength]}}%
82 {\marginpar{\usebox{\@sidenotes@marginablebox}}} %
83 }%

```

figure* The figure* environment provides a figure environment for figures across text and margin width

```

84 \AtBeginDocument{%
85 \newlength{\@sidenotes@extrawidth}
86 \setlength{\@sidenotes@extrawidth}{\marginparwidth}
87 \addtolength{\@sidenotes@extrawidth}{\marginparsep}
88 }
89 \DeclareCaptionStyle{widefigure}{margin={0pt,-\@sidenotes@extrawidth},font=footnotesize}
90 \newcommand{\@sidenotes@adjust}{%
91     \checkoddpage%
92     \ifoddpage%
93 %
94     \else%
95 \hspace{-\@sidenotes@extrawidth}%
96     \fi}
97 \renewenvironment{figure*}[1][htbp]{\begin{figure}[#1]%
98     \@sidenotes@adjust%
99     \captionsetup{style=widefigure}%
100 }\end{figure}}%

```

table* The table* environment provides a table environment for figures across text and margin width

```

101 \DeclareCaptionStyle{widetable}{margin={0pt,-\@sidenotes@extrawidth},font=footnotesize}
102 \renewenvironment{table*}[1][htbp]{\begin{table}[#1]%
103     \@sidenotes@adjust%
104     \captionsetup{style=widetable}%
105 }\end{table}}%

```

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

E 2, <u>84</u>	<code>\sidecaption*</code> 2
environments:		<code>\sidenote</code> 1, <u>10</u>
<code>figure*</code> 2, <u>84</u>	M	<code>\sidenotemark</code> 1, <u>16</u>
<code>marginfigure</code> .. 2, <u>48</u>	<code>marginfigure</code> (environ-	<code>\sidenotetext</code> 1, <u>28</u>
<code>marginable</code> ... 2, <u>66</u>	ment) 2, <u>48</u>	
<code>table*</code> 2, <u>101</u>	<code>marginable</code> (environ-	T
	ment) 2, <u>66</u>	<code>table*</code> (environment)
F	 2, <u>101</u>
<code>figure*</code> (environment)	S	
	<code>\sidecaption</code> 1, <u>39</u>	

Change History

v0.2	General: Initial version	1	v0.90	General: added a section that the package needs twoopt and changepage.	2
v0.3	marginfigure : define the sidefigure environment without the environ package	4		two opt package is required, the definitions are too confusing otherwise	1
v0.4	marginfigure : define the sidefigure environment without the environ package	4		marginfigure : the optional offset parameter is back, renamed environment from sidefigure to marginfigure	4
v0.51	General: Extent the documentation of the macros.	1		marginfigure : the optional offset parameter is back, renamed environment from sidetable to marginfigure	4
v0.52	General: added a section that the package needs marginnote, caption and xifthen.	2		marginfigure : the optional offset parameter is back, renamed environment from sidetable to marginfigure	4
v0.53	\sidenote : bugfix, now optional number and offset possible	3		\sidenote : add optional offset for sidenote	3
v0.61	General: documentation of sidetext	1		\sidenotetext : add optional offset for sidenotetext	3
v0.7	General: rewrite without optional offsets	1	v0.91	General: deleted marginfullcite	1
v0.80	\sidenote : unstar the newcommand.	3		sidenotetextstyle is not needed any more	2
	\sidenotetext : unstar the newcommand.	3		\sidecaption : sidecaption* accompanies sidecaption	3
v0.81	\sidenote : added a comma between subsequent sidenotes	3	v0.92	General: corrected typo in email address	1
v0.85	table* : added the table* environment	5	v0.93	General: regular ifnextchar gobbles trailing whitespaces, introduce a new one that does not.	3
	figure* : added the figure* environment	5		\sidenote : removed mandatory whitespace, new ifnextchar takes care of that	3
				\sidenotetext : add missing comment marks	3