

Paper Title

Firstname Lastname and Firstname Lastname

Institute

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Keywords: keyword1, keyword2

1 Introduction

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Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend

at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lect  donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

The remainder of the paper starts with a presentation of related work (Sect. 2). It is followed by a presentation of hints on \LaTeX (Sect. 3). Finally, a conclusion is drawn and outlook on future work is made (Sect. 4).

2 Related Work

Winery [2] is a graphical  modeling tool. The whole idea of TOSCA is explained by Binz et al. [1].

3 LaTeX Hints

This section contains hints on writing LaTeX. It focuses on minimal examples, which can be directly adapted to the content

3.1 Handling of paragraphs

One sentence per line. This rule is important for the usage of version control systems. A new line is generated with a blank line. As you would do in Word: New paragraphs are generated by pressing enter. In LaTeX, this does not lead to a new paragraph as LaTeX joins subsequent lines. In case you want a new paragraph, just press enter twice (!). This leads to an empty line. In word, there is the functionality to press shift and enter. This leads to a hard line break. The text starts at the beginning of a new line. In LaTeX, you can do that by using two backslashes (`\`).

This is rarely used.

Please do *not* use two backslashes for new paragraphs. For instance, this sentence belongs to the same paragraph, whereas the last one started a new one. A long motivation for that is provided at <http://loopSPACE.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3>.

Corresponding L^AT_EX code of paper-newtx.tex

```

479 One sentence per line.
480 This rule is important for the usage of version control systems.
481 A new line is generated with a blank line.
482 As you would do in Word:
483 New paragraphs are generated by pressing enter.
484 In LaTeX, this does not lead to a new paragraph as LaTeX joins
      subsequent lines.
485 In case you want a new paragraph, just press enter twice (!).
486 This leads to an empty line.
487 In word, there is the functionality to press shift and enter.
488 This leads to a hard line break.
489 The text starts at the beginning of a new line.
490 In LaTeX, you can do that by using two backslashes
      (\textbackslash\textbackslash).\
491 This is rarely used.
492
493 Please do \textit{not} use two backslashes for new paragraphs.
494 For instance, this sentence belongs to the same paragraph, whereas the
      last one started a new one.
495 A long motivation for that is provided at
      \url{http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3}.

```

3.2 Hyphenation

L^AT_EX automatically hyphenates words. When using microtype, there should be less hyphenations than in other settings. It might be necessary to tweak the hyphenations nevertheless. Here are some hints:

In case you write “application-specific”, then the word will only be hyphenated at the dash. You can also write `applica\allowbreak{}tion-specific` (result: `applica tion-specific`), but this is much more effort.

You can now write words containing hyphens which are hyphenated at other places in the word. For instance, `application"=specific` gets `application-specific`. This is enabled by an additional configuration of the `babel` package.

Corresponding L^AT_EX code of paper-newtx.tex

```

506 In case you write \enquote{application-specific}, then the word will
      only be hyphenated at the dash.
507 You can also write \verb!applica\allowbreak{}tion-specific! (result:
      applica\allowbreak{}tion-specific), but this is much more effort.
508
509 You can now write words containing hyphens which are hyphenated at
      other places in the word.
510 For instance, \verb!application"=specific! gets application-specific.
511 This is enabled by an additional configuration of the babel package.

```

3.3 Typesetting Units

Numbers can written plain text (such as 100), by using the siunitx package like that: $100 \frac{\text{km}}{\text{h}}$, or by using plain L^AT_EX (and math mode): $100 \frac{\text{km}}{\text{h}}$.

Corresponding L^AT_EX code of paper-newtx.tex

```
517 Numbers can written plain text (such as 100), by using the siunitx
      package like that:
518 \SI{100}{\km\per\hour},
519 or by using plain \LaTeX{} (and math mode):
520 $100 \frac{\mathit{km}}{h}$.
```

5 % of 10 kg

Corresponding L^AT_EX code of paper-newtx.tex

```
524 \SI{5}{\percent} of \SI{10}{kg}
```

Numbers are automatically grouped: 123 456.

Corresponding L^AT_EX code of paper-newtx.tex

```
528 Numbers are automatically grouped: \num{123456}.
```

3.4 Surrounding Text by Quotes

Please use the “enquote command” to quote something. Quoting with “quote” or “quote” also works.

Corresponding L^AT_EX code of paper-newtx.tex

```
534 Please use the \enquote{enquote command} to quote something.
535 Quoting with "\quote" or "\quote" also works.
```

3.5 Cleveref examples

Cleveref demonstration: Cref at beginning of sentence, cref in all other cases.

Heading1	Heading2
One	Two
Thee	Four

Table 1. Example table for cref demo

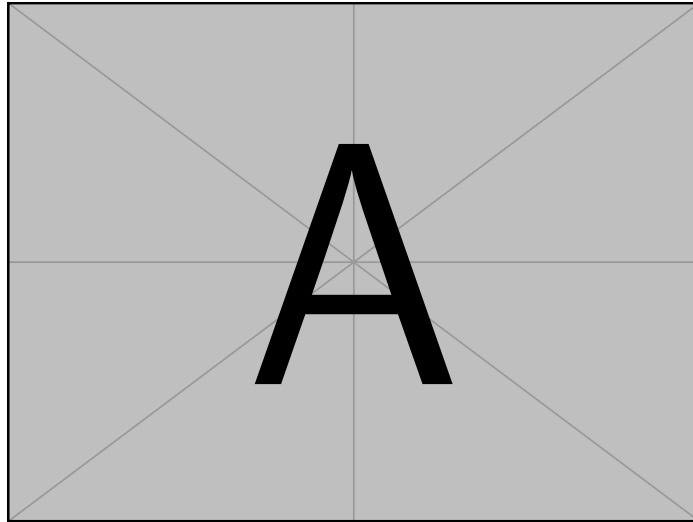


Fig. 1. Example figure for cref demo

Figure 1 shows a simple fact, although Fig. 1 could also show something else.

Table 1 shows a simple fact, although Table 1 could also show something else.

Section 3.5 shows a simple fact, although Sect. 3.5 could also show something else.

Corresponding L^AT_EX code of paper-newtx.tex

```
565 \Cref{fig:ex:cref} shows a simple fact, although \cref{fig:ex:cref}  
    could also show something else.  
566  
567 \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref}  
    could also show something else.  
568  
569 \Cref{sec:ex:cref} shows a simple fact, although \cref{sec:ex:cref}  
    could also show something else.
```

3.6 Figures

Figure 2 shows something interesting.



Fig. 2. Simple Figure. Based on Scharrer [3].

Corresponding L^AT_EX code of paper-newtx.tex

```
574 \Cref{fig:label} shows something interesting.  
575  
576 \begin{figure}  
577   \centering  
578   \includegraphics[width=.8\linewidth]{example-image-golden}  
579   \caption[Simple Figure]{Simple Figure. Based on \citete{mwe}.}  
580   \label{fig:label}  
581 \end{figure}
```

One can also have pictures floating inside text:

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. $\sin^2(\alpha) + \cos^2(\beta) = 1$. If you read this text, you will get no information $E = mc^2$. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sqrt[4]{a} \cdot \sqrt[4]{b} = \sqrt[4]{ab}$. This text should contain all letters of the alphabet and it should be written in of the original language. $\frac{\sqrt[4]{a}}{\sqrt[4]{b}} = \sqrt[4]{\frac{a}{b}}$. There is no need for special content, but the length of words should match the language. $a \sqrt[4]{b} = \sqrt[4]{a^4 b}$. Hello, here is some text without a meaning. $d\Omega = \sin \vartheta d\vartheta d\varphi$. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. $\sin^2(\alpha) + \cos^2(\beta) = 1$. This text should contain all letters of the alphabet and it should be written in of the original language $E = mc^2$. There is no need for special content, but the length of words should match the language. $\sqrt[4]{a} \cdot \sqrt[4]{b} = \sqrt[4]{ab}$.

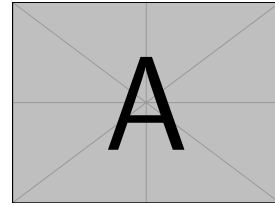


Fig. 3. A floating figure

Corresponding L^AT_EX code of paper-newtx.tex

```
588 \begin{floatingfigure}{.33\linewidth}
589 \includegraphics[width=.29\linewidth]{example-image-a}
590 \caption{A floating figure}
591 \end{floatingfigure}
592 \blindtext[2]
```

3.7 Sub Figures

An example of two sub figures is shown in Fig. 4.

Corresponding L^AT_EX code of paper-newtx.tex

```
602 \begin{figure}[!b]
603   \centering
604   \subfloat[Case
605     I]{\includegraphics[width=.4\linewidth]{example-image-a}%
606     \label{fig:first_case}}
607   \hfil
608   \subfloat[Case
609     II]{\includegraphics[width=.4\linewidth]{example-image-b}%
610     \label{fig:second_case}}
611   \caption{Example figure with two sub figures.}
612   \label{fig:two_sub_figures}
613 \end{figure}
```

3.8 Tables**Table 2.** Simple Table

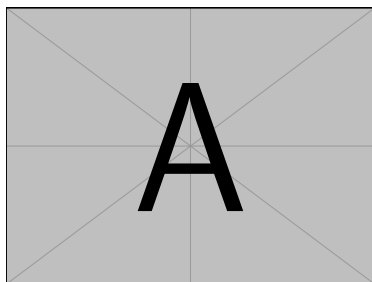
Heading1	Heading2
One	Two
Thee	Four

Corresponding L^AT_EX code of paper-newtx.tex

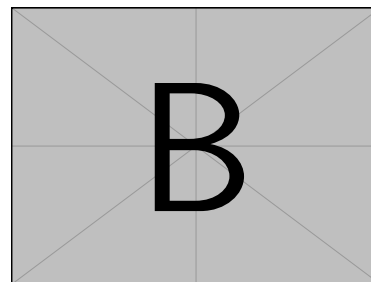
```

617 \begin{table}
618   \caption{Simple Table}
619   \label{tab:simple}
620   \centering
621   \begin{tabular}{ll}
622     \toprule
623     Heading1 & Heading2 \\
624     \midrule
625     One      & Two      \\
626     Thee    & Four     \\
627     \bottomrule
628   \end{tabular}
629 \end{table}

```



(a) Case I



(b) Case II

Fig. 4. Example figure with two sub figures.

Table 3. Table with diagonal line

Diag Column Head I	Diag Column Head II	Second	Third
		foo	bar

Corresponding L^AT_EX code of paper-newtx.tex

```

633 % Source: https://tex.stackexchange.com/a/468994/9075
634 \begin{table}
635 \caption{Table with diagonal line}
636 \label{tab:diag}
637 \begin{center}
638 \begin{tabular}{|l|c|c|}
639 \hline
640 \diagbox[width=10em]{Diag\\Column Head I}{Diag Column\\Head II} &
        Second & Third \\
641 \hline
642 & foo & bar \\
643 \hline
644 \end{tabular}
645 \end{center}
646 \end{table}

```

3.9 Source Code

Listing 1.1 shows source code written in XML. Line 2 contains a comment.

```

1 <listing name="example">
2 <!-- comment -->
3 <content>not interesting</content>
4 </listing>

```

Listing 1.1. Example XML Listing

```

1 <listing name="example">
2   Floating
3 </listing>

```

Listing 1.2. Example XML listing – placed as floating figure

```

1 {
2   key: "value"
3 }

```

Listing 1.3. Example JSON listing – placed as floating figure

Corresponding L^AT_EX code of paper-newtx.tex

```

653 \Cref{lst:XML} shows source code written in XML.
654 \Cref{line:comment} contains a comment.
655
656 \begin{lstlisting}[
657   language=XML,
658   caption={Example XML Listing},
659   label={lst:XML}]
660 <listing name="example">
661   <!-- comment --> (* \label{line:comment} *)
662   <content>not interesting</content>
663 </listing>
664 \end{lstlisting}

```

One can also add `float` as paramter to have the listing floating. Listing 1.2 shows the floating listing.

Corresponding L^AT_EX code of paper-newtx.tex

```

671 \begin{lstlisting}[
672   % one can adjust spacing here if required
673   % aboveskip=2.5\baselineskip,
674   % belowskip=-.8\baselineskip,
675   float,
676   language=XML,
677   caption={Example XML listing -- placed as floating figure},
678   label={lst:flXML}]
679 <listing name="example">
680   Floating
681 </listing>
682 \end{lstlisting}

```

One can also typeset JSON as shown in Listing 1.3.

```
1 public class Hello {
2     public static void main (String[] args) {
3         System.out.println("Hello World!");
4     }
5 }
```

Listing 1.4. Example Java listing

Corresponding \LaTeX code of paper-newtx.tex

```
688 \begin{lstlisting}[
689     float,
690     language=json,
691     caption={Example JSON listing -- placed as floating figure},
692     label={lst:json}]
693 {
694     key: "value"
695 }
696 \end{lstlisting}
```

Java is also possible as shown in Listing 1.4.

Corresponding \LaTeX code of paper-newtx.tex

```
702 \begin{lstlisting}[
703     caption={Example Java listing},
704     label=lst:java,
705     language=Java,
706     float]
707 public class Hello {
708     public static void main (String[] args) {
709         System.out.println("Hello World!");
710     }
711 }
712 \end{lstlisting}
```

3.10 Itemization

One can list items as follows:

- Item One
- Item Two

Corresponding L^AT_EX code of paper-newtx.tex

```

720 \begin{itemize}
721 \item Item One
722 \item Item Two
723 \end{itemize}

```

One can enumerate items as follows:

1. Item One
2. Item Two

Corresponding L^AT_EX code of paper-newtx.tex

```

730 \begin{enumerate}
731 \item Item One
732 \item Item Two
733 \end{enumerate}

```

With paralist, one can even have all items typeset after each other and have them clean in the tex document:

1. All these items... 2. ...appear in one line 3. This is enabled by the paralist package.

Corresponding L^AT_EX code of paper-newtx.tex

```

740 \begin{inparaenum}
741 \item All these items...
742 \item ...appear in one line
743 \item This is enabled by the paralist package.
744 \end{inparaenum}

```

3.11 Other Features

The words “workflow” and “dwarflike” can be copied from the PDF and pasted to a text file.

Corresponding L^AT_EX code of paper-newtx.tex

```

750 The words \enquote{workflow} and \enquote{dwarflike} can be copied
      from the PDF and pasted to a text file.

```

The symbol for powerset is now correct: \wp and not a Weierstrass p (\wp).

$\wp(1,2,3)$

Corresponding L^AT_EX code of paper-newtx.tex

```

754 The symbol for powerset is now correct:  $\wp$  and not a
      Weierstrass p ( $\wp$ ).
755
756  $\wp(\{1,2,3\})$ 

```

Brackets work as designed: `<test>` One can also input backquotes in verbatim text: `\verb|`test`|`.

Corresponding L^AT_EX code of paper-newtx.tex

```

760 Brackets work as designed:
761 <test>
762 One can also input backquotes in verbatim text: \verb|`test`|.

```

4 Conclusion and Outlook

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

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Acknowledgments ...

In the bibliography, use `\textsuperscript` for “st”, “nd”, ...: E.g., “The 2nd conference on examples”. When you use JabRef, you can use the `clean up` command to achieve that. See <https://help.jabref.org/en/CleanupEntries> for an overview of the `clean up` functionality.

References

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