

Paper Title

Firstname Lastname and Firstname Lastname

Institute

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Keywords: First keyword · Second keyword · Third keyword

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 lectus. Donec mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.TODO!

The remainder of the paper starts with a presentation of related work (Sect. 2). It is followed by a presentation of hints on L^AT_EX (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

```

626 œEUÜöÖ
627 One sentence per line.
628 This rule is important for the usage of version control systems.
629 A new line is generated with a blank line.
630 As you would do in Word:
631 New paragraphs are generated by pressing enter.
632 In LaTeX, this does not lead to a new paragraph as LaTeX joins
       subsequent lines.
633 In case you want a new paragraph, just press enter twice!
634 This leads to an empty line.
635 In word, there is the functionality to press shift and enter.
636 This leads to a hard line break.
637 The text starts at the beginning of a new line.
638 In LaTeX, you can do that by using two backslashes
       (\textbackslash\textbackslash).
639 \\
640 This is rarely used.
641
642 Please do \textit{not} use two backslashes for new paragraphs.
643 For instance, this sentence belongs to the same paragraph,
       whereas the last one started a new one.
644 A long motivation for that is provided at
       \url{http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3}.

```

3.2 Notes separated from the text

The package mindflow enables writing down notes and annotations in a way so that they are separated from the main text.

This is a small note.

Corresponding L^AT_EX code of ./paper-newtx.tex

```

651 œEUÜöÖ
652 \begin{mindflow}
653 This is a small note.
654 \end{mindflow}

```

3.3 Handling TODOs

Markierter Text.

Corresponding L^AT_EX code of ./paper-newtx.tex

```
659 œEúÜöÖ
660 \textmarker{Markierter Text.}
```

Bei \textmarker wird nur die Textfarbe geändert, da dies auch bei einigen Worten gut funktioniert.

 **Markierter Text.**

Corresponding L^AT_EX code of ./paper-newtx.tex

```
665 œEúÜöÖ
666 \textcomment{Markierter Text.}{Kommentar dazu.}
```

Manuelle Markierung für Text, der seit der letzten Version geändert wurde.

Corresponding L^AT_EX code of ./paper-newtx.tex

```
669 œEúÜöÖ
670 \modified{Manuelle Markierung für Text, der seit der letzten
Version geändert wurde.}
```

 Das ist ein Text. **Geänderter Text.**

Corresponding L^AT_EX code of ./paper-newtx.tex

```
673 œEúÜöÖ
674 Das ist ein Text.
675 \change{FL1: Text angepasst}{Geänderter Text.}
```

 Hier nur ein Kommentar.

Corresponding L^AT_EX code of ./paper-newtx.tex

```
678 œEúÜöÖ
679 Hier nur ein Kommentar\sidecomment{Kommentar.}
```

 TODO!

Corresponding L^AT_EX code of ./paper-newtx.tex

```
682 œEúÜöÖ
683 \todo{Hier muss noch kräftig Text produziert werden}
```

3.4 Hyphenation

\LaTeX automatically hyphenates words. When using microtype, there should be fewer 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 `\verb1applica\allowbreak{}tion-specific1` (result: application-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, `\verb1application"=specific1` gets `application"=specific`. This is enabled by an additional configuration of the babel package.

Corresponding \LaTeX code of `./paper-newtx.tex`

```

693 œEUÜÖÖ
694  In case you write \enquote{application-specific}, then the word
      will only be hyphenated at the dash.
695  You can also write \verb1applica\allowbreak{}tion-specific1
      (result: applica\allowbreak{}tion-specific), but this is
      much more effort.
696
697  You can now write words containing hyphens which are hyphenated
      at other places in the word.
698  For instance, \verb1application"=specific1 gets
      application"=specific.
699  This is enabled by an additional configuration of the babel
      package.

```

3.5 Typesetting Units

Numbers can be written plain text (such as 100), by using the siunitx package as follows: $100 \frac{\text{km}}{\text{h}}$, or by using plain \LaTeX (and math mode): $100 \frac{\text{km}}{\text{h}}$.

Corresponding \LaTeX code of `./paper-newtx.tex`

```

704  œEUÜÖÖ
705  Numbers can be written plain text (such as 100), by using the
      \href{https://ctan.org/pkg/siunitx}{siunitx} package as
      follows:
706  \SI{100}{\km\per\hour},
707  or by using plain \LaTeX{} (and math mode):
708  $100 \frac{\mathit{km}}{h}$.

```

Corresponding L^AT_EX code of ./paper-newtx.tex

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

Numbers are automatically grouped: 123 456.

Corresponding L^AT_EX code of ./paper-newtx.tex

```
715 \SI{5}{\percent}
716 Numbers are automatically grouped: \num{123456}.
```

3.6 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

```
721 \enquote{Please use the \enquote{enquote command} to quote something.
722 Quoting with ``quote'' or ```quote'' also works.}
```

3.7 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

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 3.7 shows a simple fact, although Sect. 3.7 could also show something else.

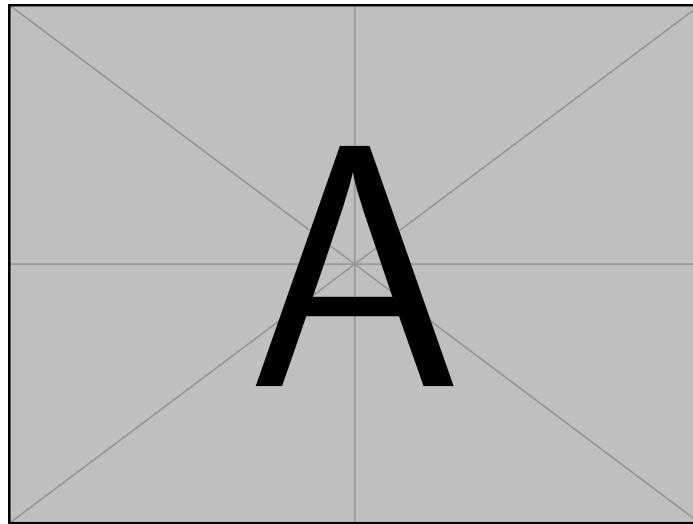


Fig. 1. Example figure for cref demo

Corresponding L^AT_EX code of ./paper-newtx.tex

```
753 \Cref{fig:ex:cref} shows a simple fact, although  
754   \cref{fig:ex:cref} could also show something else.  
755  
756 \Cref{tab:ex:cref} shows a simple fact, although  
757   \cref{tab:ex:cref} could also show something else.  
758 \Cref{sec:ex:cref} shows a simple fact, although  
    \cref{sec:ex:cref} could also show something else.
```

3.8 Figures

Figure 2 shows something interesting.



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

Corresponding L^AT_EX code of ./paper-newtx.tex

```

763 \begin{figure}
764   \Cref{fig:label} shows something interesting.
765
766   \begin{centering}
767     \includegraphics[width=.8\linewidth]{example-image-golden}
768   \end{centering}
769   \caption[Simple Figure]{Simple Figure.\\Based on \texttt{\citet{mwe}}.}
770
771 \end{figure}
772
773 \label{fig:label}
774 \end{document}
```

One can also have pictures floating inside text:

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

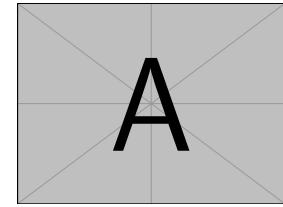


Fig. 3. A floating figure

Corresponding L^AT_EX code of ./paper-newtx.tex

```

780  \begin{floatingfigure}[.33\linewidth]{example-image-a}
781  \begin{center}
782    \includegraphics[width=.29\linewidth]{example-image-a}
783    \caption{A floating figure}
784  \end{center}
785  \end{floatingfigure}

```

3.9 Sub Figures

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

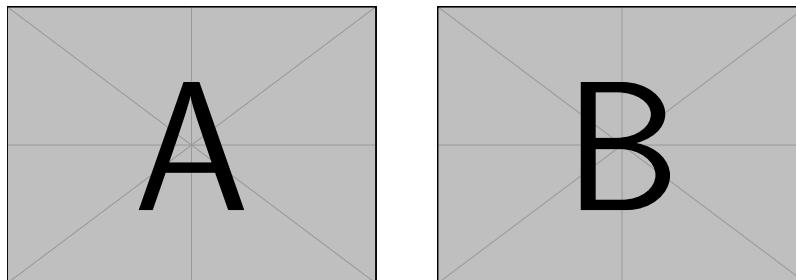


Fig. 4. Example figure with two sub figures.

Corresponding L^AT_EX code of ./paper-newtx.tex

```

792 \begin{figure}[!b]
793   \centering
794   \subfloat[Case I]{\includegraphics[width=.4\linewidth]{example-image-a}}
795   \label{fig:first_case}
796   \hfil
797   \subfloat[Case II]{\includegraphics[width=.4\linewidth]{example-image-b}}
798   \label{fig:second_case}
799   \caption{Example figure with two sub figures.}
800   \label{fig:two_sub_figures}
801 \end{figure}
802 
```

3.10 Tables

Table 2. Simple Table

Heading1	Heading2
One	Two
Thee	Four

Corresponding L^AT_EX code of ./paper-newtx.tex

```

807 \begin{table}
808   \begin{tabular}{ll}
809     \caption{Simple Table}
810     \label{tab:simple}
811     \centering
812     \begin{tabular}{ll}
813       \toprule
814       Heading1 & Heading2 \\
815       \midrule
816       One & Two \\
817       Thee & Four \\
818       \bottomrule
819     \end{tabular}
820   \end{table}

```

Table 3. Table with diagonal line

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

Corresponding L^AT_EX code of ./paper-newtx.tex

```
823 \ce{EuO}
824 % Source: https://tex.stackexchange.com/a/468994/9075
825 \begin{table}
826   \caption{Table with diagonal line}
827   \label{tab:diag}
828   \begin{center}
829     \begin{tabular}{|l|c|c|} \hline
830       \diagbox[width=10em]{Diag \\ Column Head I}{Diag
831           Column\\Head II} & Second & Third \\
832       \hline
833       & foo & bar & \\
834       \hline
835     \end{tabular}
836   \end{center}
837 \end{table}
```

3.11 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

Corresponding L^AT_EX code of ./paper-newtx.tex

```

843 \begin{lstlisting}[language=XML,caption={Example XML Listing},label={lst:XML}]
844   shows source code written in XML.
845   \Cref{line:comment} contains a comment.
846
847   \begin{lstlisting}[language=XML,
848     caption={Example XML Listing},
849     label={lst:XML}]
850     <listing name="example">
851       <!-- comment --> (* \label{line:comment} *)
852       <content>not interesting</content>
853     </listing>
854   \end{lstlisting}
```

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

Corresponding L^AT_EX code of ./paper-newtx.tex

```

861 \begin{lstlisting}[%
862   % one can adjust spacing here if required
863   % aboveskip=2.5\baselineskip,
864   % belowskip=-.8\baselineskip,
865   float,
866   language=XML,
867   caption={Example XML listing -- placed as floating figure},
868   label={lst:f1XML}]
869   <listing name="example">
870     Floating
871   </listing>
872 \end{lstlisting}
```

One can also typeset JSON as shown in Listing 1.3.

```

1 {
2   key: "value"
3 }
```

Listing 1.3. Example JSON listing – placed as floating figure

```

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 L^AT_EX code of ./paper-newtx.tex

```

878 \begin{lstlisting}[
879   float,
880   language=json,
881   caption={Example JSON listing -- placed as floating figure},
882   label=lst:json]
883 {
884   key: "value"
885 }
886 \end{lstlisting}
```

Java is also possible as shown in Listing 1.4.

Corresponding L^AT_EX code of ./paper-newtx.tex

```

892 \begin{lstlisting}[
893   caption={Example Java listing},
894   label=lst:java,
895   language=Java,
896   float]
897 public class Hello {
898   public static void main (String[] args) {
899     System.out.println("Hello World!");
900   }
901 }
902 \end{lstlisting}
```

3.12 Itemization

One can list items as follows:

- Item One
- Item Two

Corresponding L^AT_EX code of ./paper-newtx.tex

```

910 \begin{itemize}
911   \item Item One
912   \item Item Two
913 \end{itemize}
```

One can enumerate items as follows:

1. Item One
2. Item Two

Corresponding L^AT_EX code of ./paper-newtx.tex

```

920 \begin{enumerate}
921   \item Item One
922   \item Item Two
923 \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

```

930 \begin{inparaenum}
931   \item All these items...
932   \item ...appear in one line
933   \item This is enabled by the paralist package.
934 \end{inparaenum}
```

3.13 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

```
940 \mathcal{P}(1,2,3)
941 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: \mathcal{P} and not a Weierstrass p (\wp).
 $\mathcal{P}(1,2,3)$

Corresponding L^AT_EX code of ./paper-newtx.tex

```
944 \mathcal{P}(1,2,3)
945 The symbol for powerset is now correct: \$\powerset\$ and not a
      Weierstrass p (\$wp\$).
946
947 \$\powerset(\{1,2,3}\)$
```

Brackets work as designed: <test> One can also input backticks in verbatim text: `test`.

Corresponding L^AT_EX code of ./paper-newtx.tex

```
950 \mathcal{P}(1,2,3)
951 Brackets work as designed:
952 <test>
953 One can also input backticks 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.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

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References

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All links were last followed on October 5, 2020.