

Paper Title

Firstname Lastname and Firstname Lastname

Institute

Abstract. 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.

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-minted-newtx.tex

```

560 One sentence per line.
561 This rule is important for the usage of version control
   ↵ systems.
562 A new line is generated with a blank line.
563 As you would do in Word:
564 New paragraphs are generated by pressing enter.
565 In LaTeX, this does not lead to a new paragraph as LaTeX joins
   ↵ subsequent lines.
566 In case you want a new paragraph, just press enter twice!
567 This leads to an empty line.
568 In word, there is the functionality to press shift and enter.
569 This leads to a hard line break.
570 The text starts at the beginning of a new line.
571 In LaTeX, you can do that by using two backslashes
   ↵ (\textbackslash\textbackslash).
572 \\\\
573 This is rarely used.
574
575 Please do \textit{not} use two backslashes for new paragraphs.
576 For instance, this sentence belongs to the same paragraph,
   ↵ whereas the last one started a new one.
577 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-minted-newtx.tex

```

585 \begin{mindflow}
586 This is a small note.
587 \end{mindflow}

```

3.3 Handling TODOs

Markierter Text.

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

```

593 \textmarker{Markierter Text.}

```

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

`\textmarker{Markierter Text.}`

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

```
599 \textmarker{Markierter Text.}{Kommentar dazu.}
```

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

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

```
603 \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-minted-newtx.tex

```
607 Das ist ein Text.  
608 \change{FL1: Text angepasst}{Geänderter Text.}
```

Hier nur ein Kommentar.

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

```
612 Hier nur ein Kommentar\sidecomment{Kommentar}.
```

TODO!

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

```
616 \todo{Hier muss noch kräftig Text produziert werden}
```

3.4 Hyphenation

L^AT_EX 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 `applica\allowbreak{}tion-specific` (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, `application"=specific` gets `application"-specific`. This is enabled by an additional configuration of the babel package.

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

```

627 In case you write \enquote{application-specific}, then the
   ↵ word will only be hyphenated at the dash.
628 You can also write \verb1applica\allowbreak{}tion-specific1
   ↵ (result: applica\allowbreak{}tion-specific), but this is
   ↵ much more effort.
629
630 You can now write words containing hyphens which are
   ↵ hyphenated at other places in the word.
631 For instance, \verb1application"=specific1 gets
   ↵ application"=specific.
632 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 L^AT_EX (and math mode): 100 $\frac{\text{km}}{\text{h}}$.

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

```

638 Numbers can be written plain text (such as 100), by using the
   ↵ \href{https://ctan.org/pkg/siunitx}{siunitx} package as
   ↵ follows:
639 \SI{100}{\km\per\hour},
640 or by using plain \LaTeX{} (and math mode):
641 $100 \frac{\mathit{km}}{h}$.

```

5 % of 10 kg

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

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

Numbers are automatically grouped: 123 456.

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

```
649 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 **LATEX** code of ./paper-minted-newtx.tex

```
655 Please use the \enquote{enquote command} to quote something.  
656 Quoting with "``quote''" or ```quote' '' also works.  
657
```

3.7 Cleveref examples

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

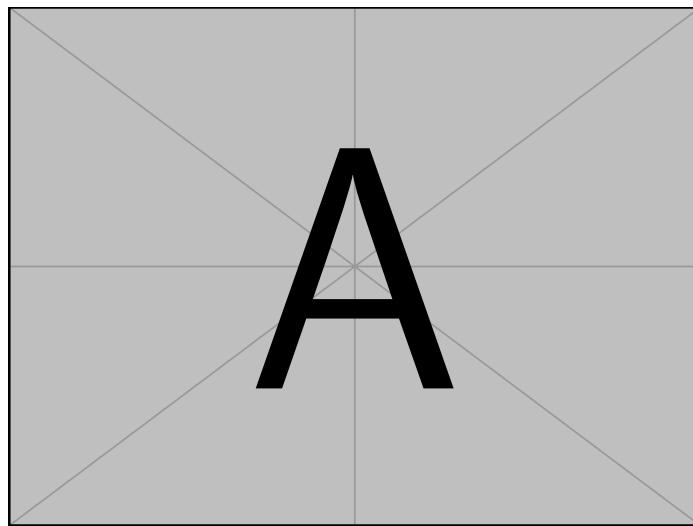


Fig. 1: Example figure for cref demo

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.

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

```
687 \Cref{fig:ex:cref} shows a simple fact, although
  ↳ \cref{fig:ex:cref} could also show something else.
688
689 \Cref{tab:ex:cref} shows a simple fact, although
  ↳ \cref{tab:ex:cref} could also show something else.
690
691 \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-minted-newtx.tex

```
697 \Cref{fig:label} shows something interesting.  
698  
699 \begin{figure}  
700   \centering  
701   \includegraphics[width=.8\linewidth]{example-image-golden}  
702   \caption[Simple Figure]{  
703     Simple Figure.  
704     Based on \citet{mwe}.  
705   }  
706   \label{fig:label}  
707 \end{figure}
```

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.

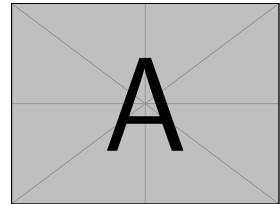


Fig. 3: A floating figure

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

```
714 \begin{floatingfigure}{.33\linewidth}
715   \includegraphics[width=.29\linewidth]{example-image-a}
716   \caption{A floating figure}
717 \end{floatingfigure}
718 \lipsum[2]
```

3.9 Sub Figures

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

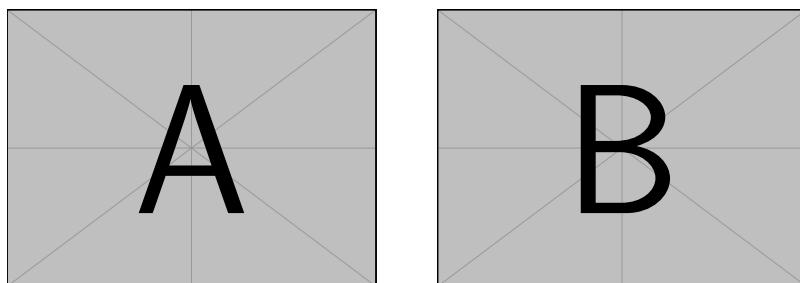


Fig. 4: Example figure with two sub figures.

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

```

726 \begin{figure}[!b]
727   \centering
728   \subfloat[Case I]{\includegraphics[width=.4\linewidth]{}}
729   \quad \scriptsize \texttt{\hookrightarrow example-image-a}\%
730   \quad \scriptsize \texttt{\label{fig:first_case}}
731   \hfil
732   \subfloat[Case II]{\includegraphics[width=.4\linewidth]{}}
733   \quad \scriptsize \texttt{\hookrightarrow example-image-b}\%
734   \quad \scriptsize \texttt{\label{fig:second_case}}
735   \caption{Example figure with two sub figures.}
736   \label{fig:two_sub_figures}
737 \end{figure}

```

3.10 Tables

Table 2: Simple Table

Heading1	Heading2
One	Two
Thee	Four

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

```

741 \begin{table}
742   \caption{Simple Table}
743   \label{tab:simple}
744   \centering
745   \begin{tabular}{ll}
746     \toprule
747     Heading1 & Heading2 \\
748     \midrule
749     One & Two \\
750     Thee & Four \\
751     \bottomrule
752   \end{tabular}
753 \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-minted-newtx.tex

```

757 % Source: https://tex.stackexchange.com/a/468994/9075
758 \begin{table}
759   \caption{Table with diagonal line}
760   \label{tab:diag}
761   \begin{center}
762     \begin{tabular}{|l|c|c|} \hline
763       & Diag & Column Head I \\ \hline
764       & Diag & Column Head II & Second & Third \\ \hline
765       & & & & \\ \hline
766       & & foo & bar & \\ \hline
767       & & & & \\ \hline
768     \end{tabular}
769   \end{center}
770 \end{table}

```

3.11 Source Code

minted is a sophisticated package to enable properly highlighted listings. It uses the pygments library, which in turn requires Python.

Listing 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>

```

List. 1: Example XML listing using minted

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

```

780 \Cref{lst:XML} shows source code written in XML.
781 \refline{line:comment} contains a comment.
782
783 \begin{listing}[htbp]
784   \begin{minted}[linenos=true,escapeinside=||]{xml}
785     <listing name="example">
786       <!-- comment --> |\label{line:comment}| 
787       <content>not interesting</content>
788     </listing>
789   \end{minted}
790   \caption{Example XML listing using minted}
791   \label{lst:XML}
792 \end{listing}
```

One can also typeset JSON as shown in Listing 2.

```

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

List. 2: Example JSON listing using minted

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

```

798 \begin{listing}[htbp]
799   \begin{minted}[linenos=true,escapeinside=||]{json}
800   {
801     key: "value"
802   }
803   \end{minted}
804   \caption{Example JSON listing using minted}
805   \label{lst:f1JSON}
806 \end{listing}
```

Java is also possible as shown in Listing 3.

```

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

List. 3: Java code rendered using minted

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

```

812 \begin{listing}[htbp]
813   \begin{minted}[linenos=true,escapeinside=||]{java}
814     public class Hello {
815       public static void main (String[] args) {
816         System.out.println("Hello World!");
817       }
818     }
819   \end{minted}
820   \caption{Java code rendered using minted}
821   \label{lst:f1Java}
822 \end{listing}
```

3.12 Itemization

One can list items as follows:

- Item One
- Item Two

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

```

830 \begin{itemize}
831   \item Item One
832   \item Item Two
833 \end{itemize}
```

One can enumerate items as follows:

1. Item One
2. Item Two

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

```

840 \begin{enumerate}
841   \item Item One
842   \item Item Two
843 \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-minted-newtx.tex

```
850 \begin{inparaenum}
851   \item All these items...
852   \item ...appear in one line
853   \item This is enabled by the paralist package.
854 \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-minted-newtx.tex

```
860 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-minted-newtx.tex

```
864 The symbol for powerset is now correct: \$\wp\$ and not a
     ↳ Weierstrass p (\$\wp\$).
865
866 \$\wp(\{1, 2, 3\})\$
```

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

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

```
870 Brackets work as designed:
871 <test>
872 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.