## **Paper Title**

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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

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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 lectonec 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.

Paper Title

### Corresponding $\LaTeX$ code of paper-minted-newtx.tex

```
413 One sentence per line.
^{414} This rule is important for the usage of version control systems.
_{\rm 415}\, A new line is generated with a blank line.
416 As you would do in Word:
New paragraphs are generated by pressing enter.
418 In LaTeX, this does not lead to a new paragraph as LaTeX joins
    \hookrightarrow subsequent lines.
In case you want a new paragraph, just press enter twice (!).
420 This leads to an empty line.
_{421} In word, there is the functionality to press shift and enter.
422 This leads to a hard line break.
423 The text starts at the beginning of a new line.
_{\rm 424} In LaTeX, you can do that by using two backslashes
    425 This is rarely used.
Please do \textit{not} use two backslashes for new paragraphs.
428 For instance, this sentence belongs to the same paragraph, whereas
    \mbox{\ }\hookrightarrow\mbox{\ } the last one started a new one.
429 A long motivation for that is provided at

    \url{http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3}
```

### 3.2 Hyphenation

LATEX automatically hyphenates words. When using microtype, there should be less hypnetations 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 LATEX code of paper-minted-newtx.tex

440 In case you write \enquote{application-specific}, then the word will

only be hyphenated at the dash.

441 You can also write \verblapplica\allowbreak{}tion-specific1 (result:

applica\allowbreak{}tion-specific), but this is much more

effort.

442

443 You can now write words containing hyphens which are hyphenated at

other places in the word.

444 For instance, \verblapplication"=specific1 gets

application"=specific.

445 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 LaTeX (and math mode):  $100 \frac{\text{km}}{\text{h}}$ .

5 % of 10 kg

```
Corresponding LATEX code of paper-minted-newtx.tex

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

Numbers are automatically grouped: 123 456.

```
Corresponding LATEX code of paper-minted-newtx.tex

462 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 LATEX code of paper-minted-newtx.tex

468 Please use the \enquote{enquote command} to quote something.
469 Quoting with "`quote"' or ``quote'' also works.
470
```

### 3.5 Cleveref examples

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

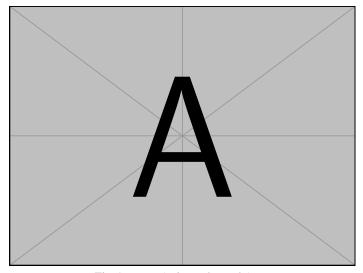


Fig. 1: Example figure for cref demo

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

## Corresponding LaTeX code of paper-minted-newtx.tex 499 \Cref{fig:ex:cref} shows a simple fact, although \cref{fig:ex:cref} → could also show something else. 500 501 \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref} → could also show something else. 502 503 \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.

# Golden ratio (Original size: 32.361×200 bp)

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

```
Corresponding LATEX code of paper-minted-newtx.tex

508 \Cref{fig:label} shows something interesting.

509

510 \begin{figure}
511 \centering
512 \includegraphics[width=.8\linewidth] {example-image-golden}
513 \caption[Simple Figure] {Simple Figure. Based on \citet{mwe}.}

514 \label{fig:label}
515 \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.  $\sqrt[q]{a} \cdot \sqrt[q]{b} = \sqrt[q]{ab}$ . This text should



Fig. 3: A floating figure

contain all letters of the alphabet and it should be written in of the original language.  $\frac{\sqrt[q]{a}}{\sqrt[q]{b}} = \sqrt[n]{\frac{a}{b}}$ . There is no need for special content, but the length of words should match the language.  $a\sqrt[q]{b} = \sqrt[q]{a^nb}$ . 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.  $\sqrt[q]{a} \cdot \sqrt[q]{b} = \sqrt[q]{ab}$ .

```
Corresponding LATEX code of paper-minted-newtx.tex

522 \begin{floatingfigure}{.33\linewidth}
523 \includegraphics[width=.29\linewidth]{example-image-a}
524 \caption{A floating figure}
525 \end{floatingfigure}
526 \blindtext[2]
```

### 3.7 Sub Figures

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

```
Corresponding LATEX code of paper-minted-newtx.tex
   \begin{figure}[!b]
536
      \centering
537
      \subfloat[Case
538
       \label{fig:first_case}}
539
     \hfil
540
      \subfloat[Case

→ II]{\includegraphics[width=.4\linewidth]{example-image-b}%

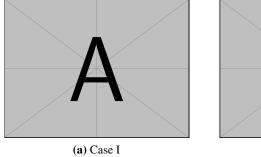
      \label{fig:second_case}}
542
     \caption{Example figure with two sub figures.}
543
     \label{fig:two_sub_figures}
544
   \end{figure}
```

### 3.8 Tables

Table 2: Simple Table

Heading1	Heading2
One	Two
Thee	Four

```
Corresponding \LaTeX code of paper-minted-newtx.tex
   \begin{table}
     \caption{Simple Table}
552
     \label{tab:simple}
553
     \centering
554
     \begin{tabular}{11}
555
       \toprule
556
      Heading1 & Heading2 \\
557
       \midrule
558
       0ne
              & Two
                           11
559
      Thee & Four
                           //
       \bottomrule
562
     \end{tabular}
563 \end{table}
```



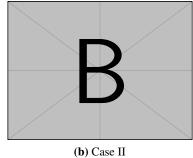


Fig. 4: Example figure with two sub figures.

Table 3: Table with diagonal line

Diag Column Head II Diag Column Head I		Third
	foo	bar

```
Corresponding \ \underline{\text{LMTE}}X \ code \ of \ \texttt{paper-minted-newtx.tex}
% Source: https://tex.stackexchange.com/a/468994/9075
568 \begin{table}
569 \caption{Table with diagonal line}
570 \label{tab:diag}
571 \begin{center}
572 \begin{tabular}{|l|c|c|}
573 \hline
574 \diagbox[width=10em]{Diag\\Column Head I}{Diag Column\\Head II} &

    Second & Third \\

575 \hline
576 & foo & bar \\
577 \hline
578 \end{tabular}
579 \end{center}
580 \end{table}
```

### 3.9 Source Code

minted is a sophisticated packes 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.

List. 1: Example XML listing using minted

### Corresponding $\LaTeX$ code of paper-minted-newtx.tex 590 \Cref{lst:XML} shows source code written in XML. 591 \refline{line:comment} contains a comment. 592 593 \begin{listing}[htbp] \begin{minted}[linenos=true,escapeinside=||]{xml} 594 595 clisting name="example"> <!-- comment --> |\labelline{line:comment}| 596 <content>not interesting</content> 597 598 </listing> 599 \end{minted} \caption{Example XML listing using minted} \label{lst:XML} 602 \end{listing}

One can also typeset JSON as shown in Listing 2.

List. 2: Example JSON listing using minted

Java is also possible as shown in ??.

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

List. 3: Java code rendered using minted

```
Corresponding LATEX code of paper-minted-newtx.tex
622 \begin{listing}[htbp]
       \begin{minted}[linenos=true,escapeinside=||]{java}
623
   public class Hello {
624
       public static void main (String[] args) {
625
           System.out.println("Hello World!");
626
627
628 }
629 \end{minted}
     \caption{Java code rendered using minted}
     \label{lst:java}
632 \end{listing}
```

### 3.10 Itemization

One can list items as follows:

- Item One
- Item Two

```
Corresponding LATEX code of paper-minted-newtx.tex
```

```
640 \begin{itemize}
641 \item Item One
642 \item Item Two
643 \end{itemize}
```

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

### Corresponding LATEX code of paper-minted-newtx.tex

With paralist, one can even have all items typset 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 LATEX code of paper-minted-newtx.tex
   \begin{inparaenum}
     \item All these items...
     \item ...appear in one line
     \item This is enabled by the paralist package.
664 \end{inparaenum}
```

### 3.11 Other Features

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

```
Corresponding LATEX code of paper-minted-newtx.tex
670 The words \enquote{workflow} and \enquote{dwarflike} can be copied
    \hookrightarrow from the PDF and pasted to a text file.
```

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

```
Corresponding LATEX code of paper-minted-newtx.tex
674 The symbol for powerset is now correct: $\powerset$ and not a

    Weierstrass p ($\wp$).

676 $\powerset({1,2,3})$
```

Brackets work as designed: <test> One can also input backquotes in verbatim text:

```
Corresponding LATEX code of paper-minted-newtx.tex
680 Brackets work as designed:
One can also input backquotes in verbatim text: \verb|`test`|.
```

### **Conclusion and Outlook**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer 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.

**Acknowledgments** Identification of funding sources and other support, and thanks to individuals and groups that assisted in the research and the preparation of the work should be included in an acknowledgment section, which is placed just before the reference section in your document [4].

In the bibliography, use \textsuperscript for "st", "nd", ...: E.g., "The 2<sup>nd</sup> 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 cleanup functionality.

### References

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All links were last followed on October 5, 2020.