# 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

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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. Do

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.tex
487 One sentence per line.
^{488} This rule is important for the usage of version control systems.
489 A new line is generated with a blank line.
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491 New paragraphs are generated by pressing enter.
_{\rm 492} In LaTeX, this does not lead to a new paragraph as LaTeX joins
        subsequent lines.
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494 This leads to an empty line.
_{495} 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.
498 In LaTeX, you can do that by using two backslashes
        (\textbackslash\textbackslash).\\
499 This is rarely used.
501 Please do \textit{not} use two backslashes for new paragraphs.
502 For instance, this sentence belongs to the same paragraph,
        whereas the last one started a new one.
_{503} 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 applicalallowbreak{}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 LATEX code of paper.tex

- 514 In case you write \enquote{application-specific}, then the word will only be hyphenated at the dash.
- 515 You can also write \mathbb{verb1applica\allowbreak{}\tion-specific1 (result: applica\allowbreak{}\tion-specific), but this is much more effort.
- $_{\mbox{\scriptsize 517}}$  You can now write words containing hyphens which are hyphenated at other places in the word.
- $_{\mbox{\scriptsize 518}}$  For instance, \verb1application"=specific1 gets application"=specific.
- $_{519}$  This is enabled by an additional configuration of the babel package.

# 3.3 Typesetting Units

516

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):  $100 \frac{\text{km}}{\text{h}}$ .

# Corresponding LATEX code of paper.tex

- Numbers can written plain text (such as 100), by using the siunitx package like that:
- 526 \SI{100}{\km\per\hour},
- 527 or by using plain \LaTeX{} (and math mode):
- 528 \$100 \frac{\mathbf{km}}{h}\$.

# 5% of $10 \,\mathrm{kg}$

# Corresponding LATEX code of paper.tex

```
_{532} \SI{5}{\percent} of \SI{10}{kg}
```

Numbers are automatically grouped: 123456.

# Corresponding LATEX code of paper.tex

 $_{536}$  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.tex

- $_{542}$  Please use the \enquote{enquote command} to quote something.
- 543 Quoting with "`quote" or ``quote' also works.

# 3.5 Cleveref examples

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

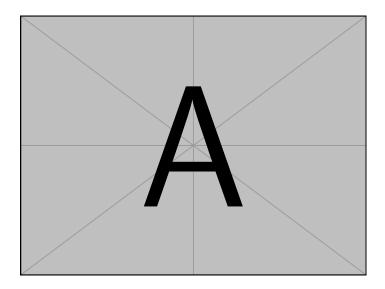


Fig. 1. Example figure for cref demo

Heading	g1 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.

#### 6

```
Corresponding LATEX code of paper.tex

573 \Cref{fig:ex:cref} shows a simple fact, although \cref{fig:ex:cref} could also show something else.

574 
575 \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref} could also show something else.

576 
577 \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.tex 582 \Cref{fig:label} shows something interesting. 583 584 \begin{figure} 585 \centering 586 \includegraphics[width=.8\linewidth]{example-image-golden} 587 \caption[Simple Figure]{Simple Figure. Based on \citet{mwe}.} 588 \label{fig:label} 589 \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.



Fig. 3. A floating figure

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

```
Corresponding LATEX code of paper.tex
```

```
596 \begin{floatingfigure}{.33\linewidth}
```

97 \includegraphics[width=.29\linewidth] {example-image-a}

598 \caption{A floating figure}

99 \end{floatingfigure}

600 \blindtext[2]

#### 3.7 Sub Figures

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

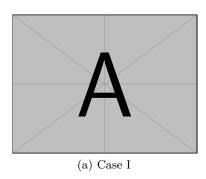
# 8

```
Corresponding LATEX code of paper.tex
   \begin{figure}[!b]
        \centering
        \subfloat[Case
            I]{\includegraphics[width=.4\linewidth]{example-image-a}%
        \label{fig:first_case}}
613
      \hfil
614
        \subfloat[Case
615
            II]{\includegraphics[width=.4\linewidth]{example-image-b}%
        \label{fig:second_case}}
616
      \caption{Example figure with two sub figures.}
617
      \label{fig:two_sub_figures}
618
   \end{figure}
```

#### 3.8 **Tables**

Table 2. Simple Table

Heading1	Heading2
One	Two
Thee	Four



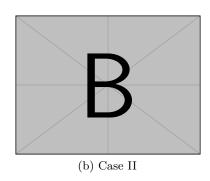


Fig. 4. Example figure with two sub figures.

#### Corresponding LATEX code of paper.tex 625 \begin{table} \caption{Simple Table} \label{tab:simple} 627 \centering 628 \begin{tabular}{11} 629 \toprule 630 Heading1 & Heading2 \\ 631 \midrule 632 One & Two 633 634 Thee & Four 635 \bottomrule \end{tabular} 637 \end{table}

Table 3. Table with diagonal line

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

```
Corresponding LATEX code of paper.tex
% Source: https://tex.stackexchange.com/a/468994/9075
642 \begin{table}
643 \caption{Table with diagonal line}
644 \label{tab:diag}
   \begin{center}
645
646 \begin{tabular}{||1|c|c|}
647 \hline
   \diagbox[width=10em]{Diag\\Column Head I}{Diag Column\\Head II}
        & Second & Third \\
649 \hline
650 & foo & bar \\
651 \hline
652 \end{tabular}
653 \end{center}
654 \ \end{table}
```

Listing 1.2. Example XML listing – placed as floating figure

# 3.9 Source Code

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

Listing 1.1. Example XML Listing

```
Corresponding \LaTeX code of paper.tex
   \Cref{lst:XML} shows source code written in XML.
662
   \Cref{line:comment} contains a comment.
_{664} \begin{lstlisting}[
     language=XML,
665
     caption={Example XML Listing},
666
     label={lst:XML}]
667
668 61sting name="example">
      <!-- comment --> (* \label{line:comment} *)
669
      <content>not interesting</content>
670
671 </listing>
672 \end{lstlisting}
```

One can also add  ${\tt float}$  as paramter to have the listing floating. Listing 1.2 shows the floating listing.

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

Listing 1.3. Example JSON listing – placed as floating figure

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

Listing 1.4. Example Java listing

```
Corresponding LATEX code of paper.tex
   \begin{lstlisting}[
679
      % one can adjust spacing here if required
680
      % aboveskip=2.5\baselineskip,
681
      % belowskip=-.8\baselineskip,
682
     float,
683
     language=XML,
684
      caption={Example XML listing -- placed as floating figure},
685
      label={lst:flXML}]
   ting name="example">
     Floating
   </listing>
   \end{lstlisting}
```

One can also typeset JSON as shown in Listing 1.3.

```
Corresponding LATEX code of paper.tex
    \begin{lstlisting}[
696
      float,
697
698
      language=json,
      \verb|caption={Example JSON listing -- placed as floating figure}|,\\
699
      label={lst:json}]
701
      key: "value"
702
    }
703
    \end{lstlisting}
704
```

Java is also possible as shown in Listing 1.4.

```
Corresponding LATEX code of paper.tex
^{710} \ \ \textbf{\ begin{lstlisting}[}
    caption={Example Java listing},
      label=lst:java,
     language=Java,
713
     float]
714
_{715} public class Hello {
        public static void main (String[] args) {
716
            System.out.println("Hello World!");
717
718
719
    \end{lstlisting}
```

# 3.10 Itemization

One can list items as follows:

```
– Item One
```

- Item Two

```
Corresponding LATEX code of paper.tex

728 \begin{itemize}
729 \item Item One
730 \item Item Two
731 \end{itemize}
```

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

```
Corresponding LATEX code of paper.tex

738 \begin{enumerate}
739 \item Item One
740 \item Item Two
741 \end{enumerate}
```

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.

# 

# 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.tex

758 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 LATEX code of paper.tex

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

Weierstrass p ($\wp$).
```

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

```
Corresponding LATEX code of paper.tex

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

# 4 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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- Veytsman, B.: Latex class for the association for computing machinery acknowledgement information (Aug 2021), https://github.com/borisveytsman/acmart/blob/1704c8bf7eee92a1515ff755f5118b6a22bb1f8e/samples/samples.dtx#L709

All links were last followed on October 5, 2020.