

# Paper Title

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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:** 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 lectus. Do  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 L<sup>A</sup>T<sub>E</sub>X (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<sup>A</sup>T<sub>E</sub>X code of paper.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<sup>A</sup>T<sub>E</sub>X 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: 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<sup>A</sup>T<sub>E</sub>X code of paper.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<sup>A</sup>T<sub>E</sub>X (and math mode): 100  $\frac{km}{h}$ .

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.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<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

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

```

Numbers are automatically grouped: 123 456.

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.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<sup>A</sup>T<sub>E</sub>X code of paper.tex

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

3.5 Cleveref examples

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

Figure

**Fig. 1.** Example figure for cref demo

Table

**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 L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```
558 \Cref{fig:ex:cref} shows a simple fact, although  
      \cref{fig:ex:cref} could also show something else.  
559  
560 \Cref{tab:ex:cref} shows a simple fact, although  
      \cref{tab:ex:cref} could also show something else.  
561  
562 \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.



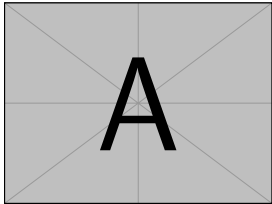
**Fig. 2.** Simple Figure. Based on Scharrer [3].

Corresponding L<sup>A</sup>T<sub>E</sub>X code of `paper.tex`

```
567 \Cref{fig:label} shows something interesting.  
568  
569 \begin{figure}  
570   \centering  
571   \includegraphics[width=.8\textwidth]{example-image-golden}  
572   \caption[Simple Figure]{Simple Figure. Based on \citet{mwe}.}  
573   \label{fig:label}  
574 \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.  $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$ . 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.  $a \sqrt[n]{b} = \sqrt[n]{a^n b}$ . 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.  $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$ .



**Fig. 3.** A floating figure

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```
581 \begin{floatingfigure}{.33\linewidth}
582 \includegraphics[width=.29\linewidth]{example-image-a}
583 \caption{A floating figure}
584 \end{floatingfigure}
585 \blindtext[2]
```

3.7 Tables

**Table 2.** Simple Table

Heading1 Heading2	
One	Two
Thee	Four

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

592 \begin{table}
593   \caption{Simple Table}
594   \label{tab:simple}
595   \centering
596   \begin{tabular}{ll}
597     \toprule
598     Heading1 & Heading2 \\
599     \midrule
600     One      & Two      \\
601     Thee     & Four     \\
602     \bottomrule
603   \end{tabular}
604 \end{table}

```

**Table 3.** Table with diagonal line

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

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

608 % Source: https://tex.stackexchange.com/a/468994/9075
609 \begin{table}
610   \caption{Table with diagonal line}
611   \label{tab:diag}
612   \begin{center}
613     \begin{tabular}{|l|c|c|}
614       \hline
615       \diagbox[width=10em]{Diag\ Column Head I}{Diag Column\ Head II}
616       & Second & Third \\
617       \hline
618       & foo & bar \\
619       \hline
620     \end{tabular}
621   \end{center}
622 \end{table}

```



---

```

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

```

---

**Listing 1.2.** Example XML listing – placed as floating figure

### 3.8 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

#### Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

628 \Cref{lst:XML} shows source code written in XML.
629 \Cref{line:comment} contains a comment.
630
631 \begin{lstlisting}[
632   language=XML,
633   caption={Example XML Listing},
634   label={lst:XML}]
635 <listing name="example">
636   <!-- comment --> (* \label{line:comment} *)
637   <content>not interesting</content>
638 </listing>
639 \end{lstlisting}

```

One can also add `float` as parameter 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

---

```

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

```

---

**Listing 1.4.** Example Java listingCorresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

646 \begin{lstlisting}[
647     % one can adjust spacing here if required
648     % aboveskip=2.5\baselineskip,
649     % belowskip=-.8\baselineskip,
650     float,
651     language=XML,
652     caption={Example XML listing -- placed as floating figure},
653     label={lst:flXML}]
654 <listing name="example">
655     Floating
656 </listing>
657 \end{lstlisting}

```

One can also typeset JSON as shown in Listing 1.3.

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

663 \begin{lstlisting}[
664     float,
665     language=json,
666     caption={Example JSON listing -- placed as floating figure},
667     label={lst:json}]
668 {
669     key: "value"
670 }
671 \end{lstlisting}

```

Java is also possible as shown in Listing 1.4.

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

677 \begin{lstlisting}[
678   caption={Example Java listing},
679   label=lst:java,
680   language=Java,
681   float]
682 public class Hello {
683     public static void main (String[] args) {
684         System.out.println("Hello World!");
685     }
686 }
687 \end{lstlisting}

```

### 3.9 Itemization

One can list items as follows:

- Item One
- Item Two

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

695 \begin{itemize}
696 \item Item One
697 \item Item Two
698 \end{itemize}

```

One can enumerate items as follows:

1. Item One
2. Item Two

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

705 \begin{enumerate}
706 \item Item One
707 \item Item Two
708 \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<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

715 \begin{inparaenum}
716   \item All these items...
717   \item ...appear in one line
718   \item This is enabled by the paralist package.
719 \end{inparaenum}

```

**3.10 Other Features**

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

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

725 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<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

729 The symbol for powerset is now correct:  $\wp$  and not a
      Weierstrass  $p$  ( $\wp$ ).
730
731  $\wp(\{1, 2, 3\})$ 

```

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

Corresponding L<sup>A</sup>T<sub>E</sub>X code of paper.tex

```

735 Brackets work as designed:
736 <test>
737 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.

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 ...

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.