Paper Title

Firstname Lastname and Firstname Lastname

Institute

Abstract. 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.

Keywords: keyword1, keyword2

1 Introduction

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.

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

2 Firstname Lastname and Firstname Lastname

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

```
412 One sentence per line.
^{413} This rule is important for the usage of version control systems.
_{\rm 414}\, A new line is generated with a blank line.
415 As you would do in Word:
_{\rm 416} New paragraphs are generated by pressing enter.
417 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 (!).
419 This leads to an empty line.
_{\rm 420} \, In word, there is the functionality to press shift and enter.
421 This leads to a hard line break.
422 The text starts at the beginning of a new line.
_{\rm 423} \, In LaTeX, you can do that by using two backslashes
    424 This is rarely used.
Please do \textit{not} use two backslashes for new paragraphs.
427 For instance, this sentence belongs to the same paragraph, whereas
    \hookrightarrow the last one started a new one.
_{\rm 428} 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 439 In case you write \enquote{application-specific}, then the word will only be hyphenated at the dash. 440 You can also write \verblapplica\allowbreak{}tion-specific1 (result: applica\allowbreak{}tion-specific), but this is much more effort. 441 442 You can now write words containing hyphens which are hyphenated at other places in the word. 443 For instance, \verblapplication"=specific1 gets application"=specific. 444 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): $100 \frac{\text{km}}{\text{h}}$.

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

450 Numbers can written plain text (such as 100), by using the siunitx

451 \SI\{100\{\km\per\hour\},

452 or by using plain \LaTeX\{\} (and math mode):

453 \$100 \frac\{\mathit\{km\}\}\{h\}\$.
```

5 % of 10 kg

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

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

Numbers are automatically grouped: 123 456.

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

461 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

467 Please use the \enquote{enquote command} to quote something.

468 Quoting with "`quote"' or ``quote'' also works.

469
```

3.5 Cleveref examples

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

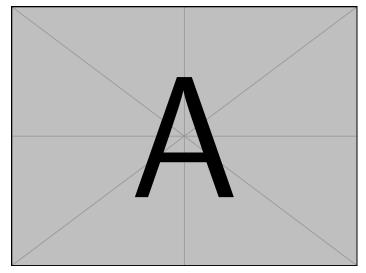


Fig. 1: Example figure for cref demo

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 498 \Cref{fig:ex:cref} shows a simple fact, although \cref{fig:ex:cref} → could also show something else. 499 500 \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref} → could also show something else. 501 502 \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

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

508

509 \begin{figure}
510 \centering
511 \includegraphics[width=.8\linewidth] {example-image-golden}
512 \caption[Simple Figure] {Simple Figure. Based on \citet{mwe}.}
513 \label{fig:label}
514 \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



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

521 \begin{floatingfigure}{.33\linewidth}

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

523 \caption{A floating figure}

524 \end{floatingfigure}

525 \blindtext[2]
```

3.7 Sub Figures

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

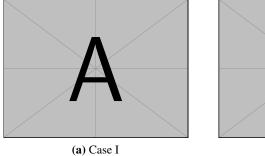
```
Corresponding LATEX code of paper-minted-newtx.tex
  \begin{figure}[!b]
535
     \centering
536
     \subfloat[Case
537
     \label{fig:first_case}}
538
    \hfil
539
     \subfloat[Case
     \label{fig:second_case}}
541
    \caption{Example figure with two sub figures.}
542
    \label{fig:two_sub_figures}
543
  \end{figure}
```

3.8 Tables

Table 2: Simple Table

Heading1	Heading2
One	Two
Thee	Four

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



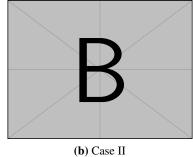


Fig. 4: Example figure with two sub figures.

Table 3: Table with diagonal line

Diag Column Head II Diag Column Head I		Third
	foo	bar

```
Corresponding \LaTeX code of paper-minted-newtx.tex
566 % Source: https://tex.stackexchange.com/a/468994/9075
567 \begin{table}
568 \caption{Table with diagonal line}
569 \label{tab:diag}
570 \begin{center}
571 \begin{tabular}{|l|c|c|}
572 \hline
573 \diagbox[width=10em]{Diag\\Column Head I}{Diag Column\\Head II} &

    Second & Third \\

574 \hline
575 & foo & bar \\
576 \hline
577 \end{tabular}
578 \end{center}
579 \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 589 \Cref{lst:XML} shows source code written in XML. 590 \refline{line:comment} contains a comment. 591 592 \begin{listing}[htbp] \begin{minted}[linenos=true,escapeinside=||]{xml} 593 594 sting name="example"> <!-- comment --> |\labelline{line:comment}| 595 <content>not interesting</content> 597 </listing> 598 \end{minted} \caption{Example XML listing using minted} \label{lst:XML} 601 \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
   \begin{listing}[htbp]
       \begin{minted}[linenos=true,escapeinside=||]{java}
622
623 public class Hello {
       public static void main (String[] args) {
624
           System.out.println("Hello World!");
625
626
627 }
628 \end{minted}
     \caption{Java code rendered using minted}
629
     \label{lst:java}
631 \end{listing}
```

3.10 Itemization

One can list items as follows:

- Item One
- Item Two

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

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

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

Corresponding LATEX code of paper-minted-newtx.tex

```
649 \begin{enumerate}
650 \item Item One
651 \item Item Two
652 \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.

```
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.
663 \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
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
673 The symbol for powerset is now correct: $\powerset$ and not a
   675 $\powerset({1,2,3})$
```

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

```
Corresponding LATEX code of paper-minted-newtx.tex
679 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 ...

In the bibliography, use \textsuperscript for "st", "nd", \dots : E.g., "The 2^{nd} 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

- 1. Binz, T., Breiter, G., Leymann, F., Spatzier, T.: Portable Cloud Services Using TOSCA. IEEE Internet Computing 16(03), 80–85 (May 2012)
- Kopp, O., et al.: Winery A Modeling Tool for TOSCA-based Cloud Applications. In: Proceedings of 11th International Conference on Service-Oriented Computing (ICSOC'13). LNCS, vol. 8274, pp. 700–704. Springer Berlin Heidelberg (2013)
- 3. Scharrer, M.: The mwe Package (2017), http://texdoc.net/mwe

All links were last followed on October 5, 2020.