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-newtx.tex
481 One sentence per line.
482 This rule is important for the usage of version control systems.
_{\rm 483} \, A new line is generated with a blank line.
484 As you would do in Word:
New paragraphs are generated by pressing enter.
486 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 (!).
488 This leads to an empty line.
   In word, there is the functionality to press shift and enter.
490 This leads to a hard line break.
   The text starts at the beginning of a new line.
_{\rm 492} In LaTeX, you can do that by using two backslashes
         (\textbackslash\textbackslash).\\
   This is rarely used.
493
Please do \textit{not} use two backslashes for new paragraphs.
  For instance, this sentence belongs to the same paragraph, whereas the
        last one started a new one.
497 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 LATEX code of paper-newtx.tex

| begin{mindflow} |
| This is a small note. |
| bed{mindflow} |
```

3.3 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.

4 Firstname Lastname and Firstname Lastname

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 LTEX code of paper-newtx.tex

518 In case you write \enquote{application-specific}, then the word will only be hyphenated at the dash.

519 You can also write \verblapplica\allowbreak{}tion-specific1 (result: applica\allowbreak{}tion-specific), but this is much more effort.

520

521 You can now write words containing hyphens which are hyphenated at other places in the word.

522 For instance, \verblapplication"=specific1 gets application"=specific.

523 This is enabled by an additional configuration of the babel package.
```

3.4 Typesetting Units

Numbers can written plain text (such as 100), by using the siunity 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-newtx.tex

529 Numbers can written plain text (such as 100), by using the siunitx package like that:
530 \SI{100}{\km\per\hour},
531 or by using plain \LaTeX{} (and math mode):
532 $100 \frac{\mathit{km}}{h}$.
```

5 % of 10 kg

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

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

Numbers are automatically grouped: 123 456.

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

540 Numbers are automatically grouped: \num{123456}.
```

3.5 Surrounding Text by Quotes

Please use the "enquote command" to quote something. Quoting with "quote" or "quote" also works.

Corresponding \LaTeX code of paper-newtx.tex

- $_{546}$ Please use the \enquote{enquote command} to quote something.
- Quoting with "`quote"' or ``quote'' also works.

3.6 Cleveref examples

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

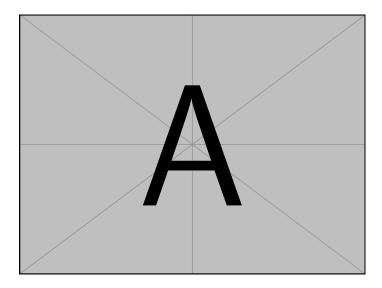


Fig. 1. Example figure for cref demo

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 3.6 shows a simple fact, although Sect. 3.6 could also show something else.

```
6
```

```
Corresponding \LaTeX code of paper-newtx.tex
    \label{lem:cref} $$\operatorname{cref}_{\text{shows a simple fact, although } \operatorname{cref}_{\text{fig:ex:cref}}$$
         could also show something else.
579
    \Cref{tab:ex:cref} shows a simple fact, although \cref{tab:ex:cref}
580
         could also show something else.
581
   \Cref{sec:ex:cref} shows a simple fact, although \cref{sec:ex:cref}
582
         could also show something else.
```

3.7 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-newtx.tex
   \Cref{fig:label} shows something interesting.
589
   \begin{figure}
590
     \centering
591
     \includegraphics[width=.8\linewidth]{example-image-golden}
592
     \caption[Simple Figure]{Simple Figure. Based on \citet{mwe}.}
593
     \label{fig:label}
594
   \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-newtx.tex

| begin{floatingfigure}{.33\linewidth} |
| includegraphics[width=.29\linewidth]{example-image-a} |
| caption{A floating figure} |
| tend{floatingfigure} |
| blindtext[2]
```

3.8 Sub Figures

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

```
Corresponding LATEX code of paper-newtx.tex
    \begin{figure}[!b]
615
        \centering
616
        \subfloat[Case
617
             I]{\includegraphics[width=.4\linewidth]{example-image-a}%
        \label{fig:first_case}}
618
      \hfil
619
        \subfloat[Case
620
             II]{\includegraphics[width=.4\linewidth]{example-image-b}%
        \label{fig:second_case}}
621
      \caption{Example figure with two sub figures.}
622
      \label{fig:two_sub_figures}
623
   \end{figure}
```

8

3.9 Tables

Table 2. Simple Table

Heading1	Heading2
One	Two
Thee	Four

```
Corresponding LATEX code of paper-newtx.tex
630 \begin{table}
      \caption{Simple Table}
631
      \label{tab:simple}
632
      \centering
633
      \begin{tabular}{11}
634
        \toprule
635
        Heading1 & Heading2 \\
636
637
        \midrule
        One & Two
Thee & Four
638
639
        \verb|\bottomrule|
640
     \end{tabular}
641
642 \end{table}
```

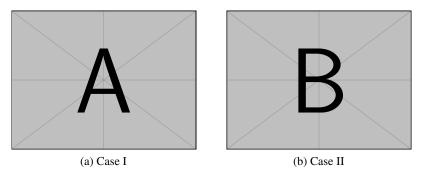


Fig. 4. Example figure with two sub figures.

Table 3. Table with diagonal line

Diag Column Head II Diag Column Head I		Third
	foo	bar

```
Corresponding LATEX code of paper-newtx.tex
% Source: https://tex.stackexchange.com/a/468994/9075
647 \begin{table}
648 \caption{Table with diagonal line}
649 \label{tab:diag}
650 \begin{center}
^{651} \begin{tabular}{||1|c|c|}
652 \hline
{\tt 653} $$ \diagbox[width=10em]{Diag\Column Head I}{Diag Column\Head II} \& 
        Second & Third \\
654 \hline
655 & foo & bar \\
656 \hline
657 \end{tabular}
658 \end{center}
659 \end{table}
```

3.10 Source Code

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

Listing 1.1. Example XML Listing

Listing 1.2. Example XML listing – placed as floating figure

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

Listing 1.3. Example JSON listing – placed as floating figure

```
Corresponding LATEX code of paper-newtx.tex
   \Cref{lst:XML} shows source code written in XML.
   \Cref{line:comment} contains a comment.
667
668
669 \begin{lstlisting}[
    language=XML,
670
   caption={Example XML Listing},
671
    label={lst:XML}]
673 clisting name="example">
   <!-- comment --> (* \label{line:comment} *)
     <content>not interesting</content>
676 </listing>
677 \end{lstlisting}
```

One can also add float as paramter to have the listing floating. Listing 1.2 shows the floating listing.

```
Corresponding LATEX code of paper-newtx.tex
   \begin{lstlisting}[
684
     % one can adjust spacing here if required
685
     % aboveskip=2.5\baselineskip,
686
     % belowskip=-.8\baselineskip,
     float,
     language=XML,
689
     caption={Example XML listing -- placed as floating figure},
    label={lst:flXML}]
691
692 clisting name="example">
    Floating
693
694 </listing>
   \end{lstlisting}
```

One can also typeset JSON as shown in Listing 1.3.

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

Listing 1.4. Example Java listing

Java is also possible as shown in Listing 1.4.

```
Corresponding \LaTeX code of paper-newtx.tex
715 \begin{lstlisting}[
716 caption={Example Java listing},
     label=lst:java,
717
    language=Java,
718
719
     float]
720 public class Hello {
721
       public static void main (String[] args) {
           System.out.println("Hello World!");
722
723
724 }
725 \end{lstlisting}
```

3.11 Itemization

One can list items as follows:

- Item One
- Item Two

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

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

//43 \begin{enumerate}
//44 \item Item One
//45 \item Item Two
//46 \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-newtx.tex

// begin{inparaenum}

// item All these items...

// item ...appear in one line

// item This is enabled by the paralist package.

// end{inparaenum}
```

3.12 Other Features

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

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

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 (\mathcal{P}) . $\mathcal{P}(1,2,3)$

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

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

768
769 $\powerset({1,2,3})$
```

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

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

773 Brackets work as designed:
774 <test>
775 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^{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)
- 2. 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
- 4. 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.