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: First keyword · Second keyword · Third keyword

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 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. Donec et n  am vulputate metus eu enim. Vestibulum pellentesque felis eu massa.TODO!

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`.

Corresponding LaTeX code of `./paper.tex`

```
œŒüÜöÖ
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
    (\textbackslash\textbackslash).
\\
This is rarely used.

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.
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.tex`

```
œŒüÜöÖ
\begin{mindflow}
This is a small note.
\end{mindflow}
```

3.3 Handling TODOs

Markierter Text.

Corresponding LaTeX code of ./paper.tex

```
671 œŒüŰöŐ
672 \textmarker{Markierter Text.}
```

Bei `\textmarker` wird nur die Textfarbe geändert, da dies auch bei einigen Worten gut funktioniert.

Markierter Text.

Corresponding LaTeX code of ./paper.tex

```
677 œŒüŰöŐ
678 \textcomment{Markierter Text.}{Kommentar dazu.}
```

Manuelle Markierung für Text, der seit der letzten Version geändert wurde.

Corresponding LaTeX code of ./paper.tex

```
681 œŒüŰöŐ
682 \modified{Manuelle Markierung für Text, der seit der letzten
        Version geändert wurde.}
```

Das ist ein Text. Geänderter Text.

Corresponding LaTeX code of ./paper.tex

```
685 œŒüŰöŐ
686 Das ist ein Text.
687 \change{FL1: Text angepasst}{Geänderter Text}.
```

Hier nur ein Kommentar.

Corresponding LaTeX code of ./paper.tex

```
690 œŒüŰöŐ
691 Hier nur ein Kommentar\sidecomment{Kommentar}.
```

TODO!

Corresponding LaTeX code of ./paper.tex

```
694 œŒüŰöŐ
695 \todo{Hier muss noch kräftig Text produziert werden}
```

3.4 Hyphenation

LaTeX automatically hyphenates words. When using microtype, there should be fewer 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 LaTeX code of `./paper.tex`

```
œŒúŰóŐ
In case you write \enquote{application-specific}, then the word
    will only be hyphenated at the dash.
You can also write \verb1applica\allowbreak{}tion-specific1
    (result: applica\allowbreak{}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, \verb1application"=specific1 gets
    application"=specific.
This is enabled by an additional configuration of the babel
    package.
```

3.5 Typesetting Units

Numbers can be written plain text (such as 100), by using the siunitx package as follows: 100 $\frac{\mathrm{km}}{\mathrm{h}}$, or by using plain LaTeX (and math mode): $100\frac{km}{h}$.

Corresponding LaTeX code of `./paper.tex`

```
œŒúŰóŐ
Numbers can be written plain text (such as 100), by using the
    \href{https://ctan.org/pkg/siunitx}{siunitx} package as
    follows:
\SI{100}{\km\per\hour},
or by using plain \LaTeX{} (and math mode):
$100 \frac{\mathit{km}}{h}$.
```

5 % of 10 kg

Corresponding LaTeX code of `./paper.tex`

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

Numbers are automatically grouped: 123 456.

Corresponding LaTeX code of `./paper.tex`

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

3.6 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`

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

3.7 Cleveref examples

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

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 3.7 shows a simple fact, although Sect. 3.7 could also show something else.

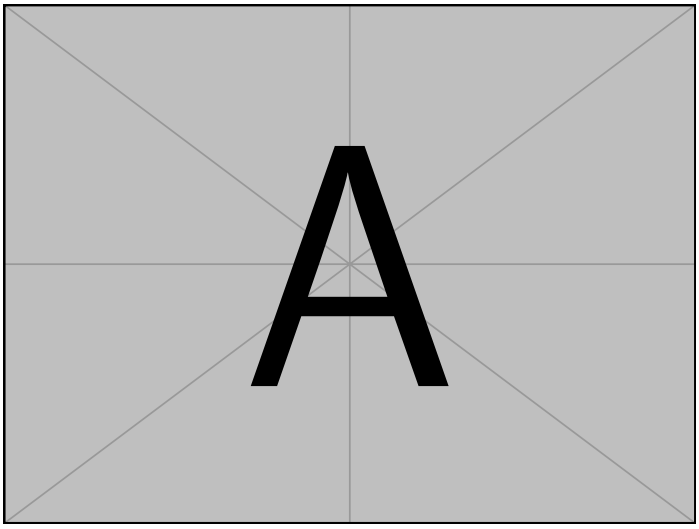


Fig. 1. Example figure for cref demo

Corresponding LaTeX code of `./paper.tex`

```
765 œŒúŰóŐ
766 \Cref{fig:ex:cref} shows a simple fact, although
        \cref{fig:ex:cref} could also show something else.
767
768 \Cref{tab:ex:cref} shows a simple fact, although
        \cref{tab:ex:cref} could also show something else.
769
770 \Cref{sec:ex:cref} shows a simple fact, although
        \cref{sec:ex:cref} could also show something else.
```

3.8 Figures

Figure 2 shows something interesting.

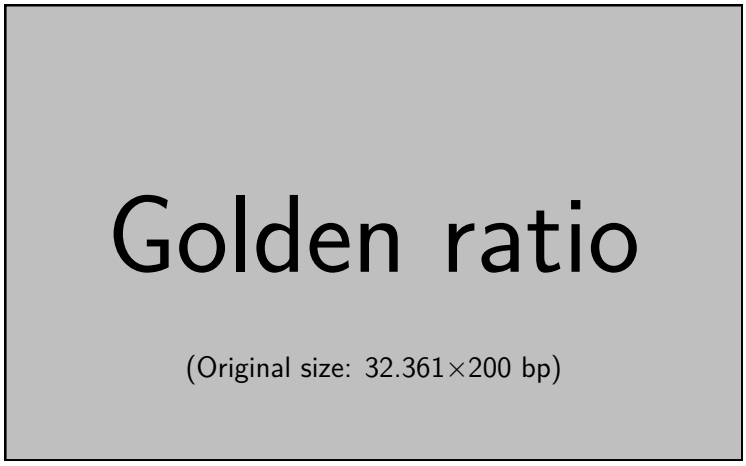


Fig. 2. Simple Figure. Based on Scharrer [3].

Corresponding LaTeX code of `./paper.tex`

```
775 œŒúŰóŐ
776 \Cref{fig:label} shows something interesting.
777
778 \begin{figure}
779   \centering
780   \includegraphics[width=.8\linewidth]{example-image-golden}
781   \caption[Simple Figure]{
782     Simple Figure.
783     Based on \citet{mwe}.
784   }
785   \label{fig:label}
786 \end{figure}
```

One can also have pictures floating inside text:

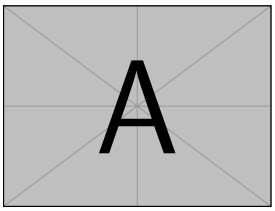


Fig. 3. A floating figure

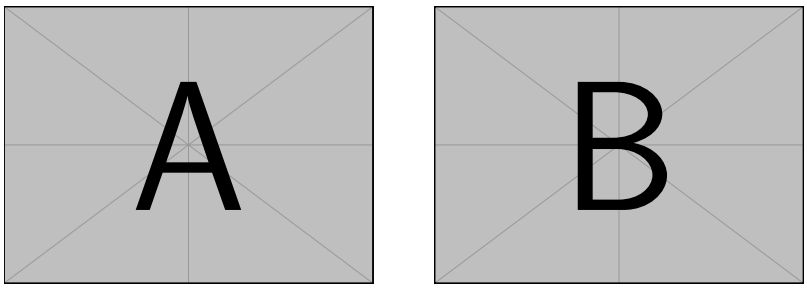
Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit 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.

Corresponding LaTeX code of `./paper.tex`

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

3.9 Sub Figures

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



(a) Case I (b) Case II

Fig. 4. Example figure with two sub figures.

Corresponding LaTeX code of `./paper.tex`

```
804 œŒúŰőŐ
805 \begin{figure}[!b]
806   \centering
807   \subfloat[Case
          I]{\includegraphics[width=.4\linewidth]{example-image-a}%
808     \label{fig:first_case}}
809   \hfil
810   \subfloat[Case
          II]{\includegraphics[width=.4\linewidth]{example-image-b}%
811     \label{fig:second_case}}
812   \caption{Example figure with two sub figures.}
813   \label{fig:two_sub_figures}
814 \end{figure}
```

3.10 Tables

Table 2. Simple Table

Heading1	Heading2
One	Two
Thee	Four

Corresponding LaTeX code of `./paper.tex`

```
819 œŒúŰőŐ
820 \begin{table}
821   \caption{Simple Table}
822   \label{tab:simple}
823   \centering
824   \begin{tabular}{ll}
825     \toprule
826     Heading1 & Heading2 \\
827     \midrule
828     One      & Two      \\
829     Thee     & Four     \\
830     \bottomrule
831   \end{tabular}
832 \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`

```
835 œĒúŰőŐ
836 % Source: https://tex.stackexchange.com/a/468994/9075
837 \begin{table}
838   \caption{Table with diagonal line}
839   \label{tab:diag}
840   \begin{center}
841     \begin{tabular}{|l|c|c|}
842       \hline
843       \diagbox[width=10em]{Diag \\Column Head I}{Diag
              Column\\Head II} & Second & Third \\
844       \hline
845        & foo & bar             \\
846       \hline
847     \end{tabular}
848   \end{center}
849 \end{table}
```

3.11 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

```
<listing name="example">
  Floating
</listing>
```

Listing 1.2. Example XML listing – placed as floating figure

Corresponding LaTeX code of `./paper.tex`

```
œŒüŰóŐ
\Cref{lst:XML} shows source code written in XML.
\Cref{line:comment} contains a comment.

\begin{lstlisting}[
  language=XML,
  caption={Example XML Listing},
  label={lst:XML}]
<listing name="example">
  <!-- comment --> (* \label{line:comment} *)
  <content>not interesting</content>
</listing>
\end{lstlisting}
```

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

Corresponding LaTeX code of `./paper.tex`

```
œŒüŰóŐ
\begin{lstlisting}[
  % one can adjust spacing here if required
  % aboveskip=2.5\baselineskip,
  % belowskip=-.8\baselineskip,
  float,
  language=XML,
  caption={Example XML listing -- placed as floating figure},
  label={lst:flXML}]
<listing name="example">
  Floating
</listing>
\end{lstlisting}
```

One can also typeset JSON as shown in Listing 1.3.

```
{
  key: "value"
}
```

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`

```
œĖúŰöŐ
\begin{lstlisting}[
  float,
  language=json,
  caption={Example JSON listing -- placed as floating figure},
  label={lst:json}]
{
  key: "value"
}
\end{lstlisting}
```

Java is also possible as shown in Listing 1.4.

Corresponding LaTeX code of `./paper.tex`

```
œĖúŰöŐ
\begin{lstlisting}[
  caption={Example Java listing},
  label=lst:java,
  language=Java,
  float]
public class Hello {
    public static void main (String[] args) {
        System.out.println("Hello World!");
    }
}
\end{lstlisting}
```

3.12 Itemization

One can list items as follows:

- Item One
- Item Two

Corresponding LaTeX code of `./paper.tex`

```
922 œŒéúŰőŐ
923 \begin{itemize}
924   \item Item One
925   \item Item Two
926 \end{itemize}
```

One can enumerate items as follows:

1. Item One
2. Item Two

Corresponding LaTeX code of `./paper.tex`

```
932 œŒéúŰőŐ
933 \begin{enumerate}
934   \item Item One
935   \item Item Two
936 \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 LaTeX code of `./paper.tex`

```
942 œŒéúŰőŐ
943 \begin{inparaenum}
944   \item All these items...
945   \item ...appear in one line
946   \item This is enabled by the paralist package.
947 \end{inparaenum}
```

3.13 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`

```
œŒüŰöŐ
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: $\powerset$ and not a Weierstrass p ($\wp$).
$\powerset(1,2,3)$

Corresponding LaTeX code of `./paper.tex`

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

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

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

Corresponding LaTeX code of `./paper.tex`

```
œŒüŰöŐ
Brackets work as designed:
<test>
One can also input backticks 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.

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All links were last followed on October 5, 2020.