Schöne Grafiken mit TikZ - A Beginner's Guide

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TikZ - Beginner's Guide

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Introduction

When to use and examples

setup



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- TikZ TikZ ist kein Zeichenprogramm
- ▶ LATEX / PGF-based drawing framework
- program your graphics instead of using annoying UI-based tools
- ► TikZ either integrates into your document or creates stand-alone vector graphics.

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Pros

- ► Integrates seamlessly into LATEXdocuments
- Sharp, precise vector graphics
- Usage of variables, loops and other programming stuff
- ► Easily version controllable (git)

Cons

- Steep learning curve
- drawing takes time
- May become confusing for larger graphics

Klartext-Block

Eingangspermutation

Rundenschlüssel

Rundenschlüssel

Rundenschlüssel

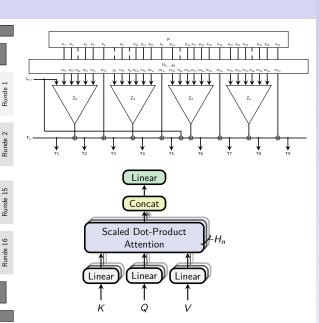
Rundenschlüssel

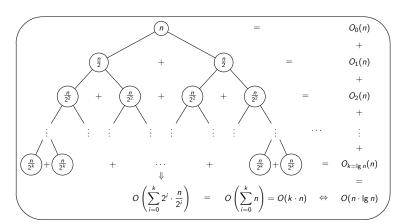
Ausgangspermutation Chiffrat-Block Michael Altenhuber

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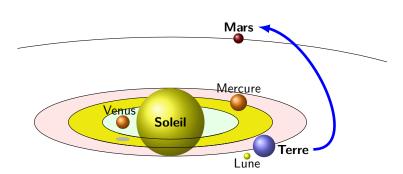
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Block 1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer lectus nisl, ultricies in feugiat rutrum, porttitor sit amet augue. Aliquam ut tortor mauris. Sed volutpat ante purus, quis accumsan dolor.

Block 2

Pellentesque sed tellus purus. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Vestibulum quis magna at risus dictum tempor eu vitae velit.

Block 3

Suspendisse tincidunt sagittis gravida. Curabitur condimentum, enim sed venenatis rutrum, ipsum neque consectetur orci, sed blandit justo nisi ac lacus.

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Heading

- 1. Statement
- Explanation
- 3. Example

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer lectus nisl, ultricies in feugiat rutrum, porttitor sit amet augue. Aliquam ut tortor mauris. Sed volutpat ante purus, quis accumsan dolor.

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| Treatments | Response 1 | Response 2 |
|-------------|------------|------------|
| Treatment 1 | 0.0003262 | 0.562 |
| Treatment 2 | 0.0015681 | 0.910 |
| Treatment 3 | 0.0009271 | 0.296 |

Table: Table caption

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Theorem (Mass-energy equivalence)

$$E = mc^2$$

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```
Example (Theorem Slide Code)
```

```
\begin{frame}
\frametitle{Theorem}
\begin{theorem}[Mass--energy equivalence]
$E = mc^2$
\end{theorem}
\end{frame}
```

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Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

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An example of the \cite command to cite within the presentation:

This statement requires citation [Smith, 2012].

References

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John Smith (2012)
Title of the publication

Journal Name 12(3), 45 - 678.

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The End