

THIS IS THE NORMAL LENGTH OF A RESEARCH PAPER: ALWAYS LONGER
THAN YOU WOULD EXPECT

KAI NORMAN CLASEN INSITUTE NAME



Outline

1. Aspect ratio
2. vfilleditems
3. Fonts
4. Color
5. Graphics
6. Footer options
7. Citations



Aspect ratio

This pdf uses a 16:9 aspect ratio. To utilize this version, simply use:

```
\documentclass[aspectratio=169]{beamer}
```

The default is a 4:3 aspect ratio.

```
\documentclass{beamer}
```



Using vfilleditems

Use the provided `\vfilleditems` environment to create nicely spaced bullet points.

```
\begin{vfilleditems}
  \item I like it to have my bullet points
  \item evenly spaced from one another
  \item then few bullet points, are not crammed on
    the upper part of the slide
\end{vfilleditems}
```



Using vfilleditems

- I like it to have my bullet points
- evenly spaced from one another
- then few bullet points, are not crammed on the upper part of the slide



Fonts

Fonts:

This is small

This is normal size

This is large

Per default the *Fira Font Package* is used. The *Helvetica Font* is also bundled into this package.



Fonts

To use *Helvetica* instead of *Fira Fonts*

```
\usetheme[helvetica]{pureminimalistic}
```

To disable the *Fira Fonts* and use the default font

```
\usetheme[nofirafonts]{pureminimalistic}
```



Color

To overwrite the theme color

1. Define a new color
2. redefine the themes color (before document begins)



Change color example

```
\usetheme{pureminimalistic}
\definecolor{textcolor}{RGB}{0, 0, 120}
\definecolor{title}{RGB}{0, 0, 0}
\definecolor{footercolor}{RGB}{133, 133, 133}
\definecolor{bg}{RGB}{25, 116, 210}

\renewcommand{\beamertextcolor}{textcolor}
\renewcommand{\beamerbgcolor}{bg}
\renewcommand{\beamerfootertextcolor}{footercolor}
\renewcommand{\beamertitlecolor}{title}
```



Dark mode

I've included a simple way to use a dark mode color theme. To use the dark color mode, provide the darkmode option.

```
\usetheme[darkmode]{pureminimalistic}
```

Sometimes, the logos have to be changed to look nice on a dark background. For now, I am simply loading different files if darkmode is used.



Logos

Commands setting the logos:

- `\logotitle` – Command used for the title page. Here `\linewidth` corresponds to the entire paper width.
- `\logoheader` – Command used for the header. Here `\linewidth` corresponds to a smaller box, as the horizontal space is shared with the title.
- `\logofooter` – Command used for the footer. Here `\linewidth` corresponds to a smaller box, as the horizontal space is shared with the footer text.



Logos – Load own logo

To use your own logos, simply redefine the commands and adjust the sizes.

```
\renewcommand{\logotitle}{\includegraphics%  
  [width=.2\linewidth]{alternative_logo/gameboy.png}}  
\renewcommand{\logoheader}{\includegraphics%  
  [width=.5\linewidth]{alternative_logo/gameboy.png}}  
\renewcommand{\logofooter}{\includegraphics%  
  [width=.15\linewidth]{alternative_logo/console.png}}
```



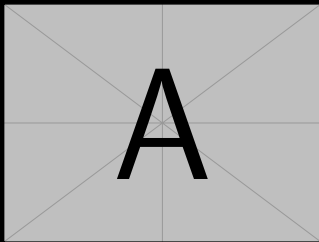
Logos – Disable logo

To disable the logo, overwrite the default logo command with an empty command.

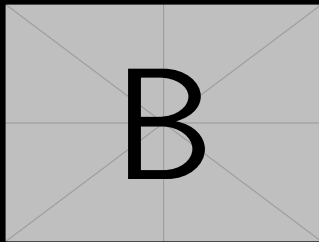
```
\renewcommand{\logofooter}{}{}
```

Figures

I also changed the default caption settings to not include Figure: and reduced the font size.



Example A



Example B



Figures – Set background watermark

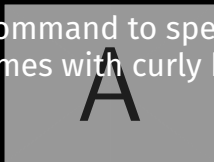
There is no extra option to define a background watermark, but here is a command that could be used to create one manually:

```
\setbeamertemplate{background}{%  
  \tikz[overlay,remember picture]%  
  \node[opacity=0.8]at (current page.center)%  
  {\includegraphics[width=.2\linewidth]%  
  {example-image-a}};%  
}
```



Figures – Set background watermark

Usually you would add this command to specific frames by enclosing this command and all desired frames with curly brackets.



See the source code of this **.tex* file for an example.



Disable footer

If you do not want to use a footer, disable it with:

```
\usetheme[nofooter]{pureminimalistic}
```



Show max slide numbers

For these slides, I used the option to show the maximum number of slides. To activate it one has to activate it with:

```
\usetheme[showmaxslides]{pureminimalistic}
```

Usually, I prefer to not show the maximum number of slides, as the people tend to lose focus if they know the last few slides are shown.



Citations

I've also changed the bibliography options to be minimalistic:
Just showing a simple `\cite [1]`

- [1] Alex Krizhevsky et al. “ImageNet Classification with Deep Convolutional Neural Networks”. In: *Advances in Neural Information Processing Systems 25*. Curran Associates, Inc., 2012, pp. 1097–1105.

Backup Slides



What happened to the page numbering?

- I've used the `appendixnumberbeamer` package, which resets the frame counting after calling `\appendix`
- Depending on the used pdf viewer, the total count of frames shouldn't include the backup slides and won't demotivate the audience.
- Usually, I would use a `plain` frame for the backup slides.