LaTeX-Beamer Style for NTNU

Documentation.

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Contents

The LaTeX beamer NTNU Theme

This LaTeXbeamer theme is based on the Powerpoint templates available at Innsida. The design of these templates is owned by NTNU, and should not be altered substantially without checking it with the Communication Division.

This documentation assumes that you have your editor and LaTeX compiler set up and running. For LaTeX beamer, the full documentation is available at `https://texdoc.org/serve/beamer/0`.

This documentation

- ▶ gets you started (slide #4)
- ▶ illustrates what the three styles look like (demo after slide #5 onwards)
- ▶ documents all available options and features (Slide #6)

Start A Presentation

1. Copy all eight `.sty` files (Style files) and all seven `.png` files (the logos) to the folder, where you want to write your presentation

2. Copy either the `ntnu-beamer-example-eng.tex`
   or the `ntnu-beamer-example-eng.tex` to that folder, too

3. Open the just copied `.tex` file and start writing your presentation, i.e.
   - ▶ fill out author and title
   - ▶ fill or comment out (`%` at the beginning of the line) the subtitle
   - ▶ set the date or leave it at the current date
   - ▶ Start writing your slides (called `frames`), two examples are already given in the template

You can repeat this whenever you start preparing a new presentation.

A more elaborate way *instead* of copying all files from step 1 is to include them in your LaTeX path.

Different styles

The following 6 slides illustrate the three styles you can choose, first showing the title page and then a usual slide that also explains how to choose this style.

Note that since `slogan=english`, `style=plain`, and `mathfont=sans` are the defaults, if you use

`\usetheme{NTNU}`

that is the same as

`\usetheme[slogan=english, style=plain, mathfont=sans]{NTNU}`

A slide in `plain` style

This style is set up with

```
\usetheme[slogan=english, style=plain, mathfont=serif]{NTNU}
```

Here you can see that the `plain` (default) style has just a logo in the bottom left and a slide number in the bottom right.

The slogan can be english or norwegian depending on the `slogan=` option. Here it is set to `english` (default).

The slide number can also have the total number of slides setting `frametotal=true`, which is `false` (the default) here.

The font in math mode is here set by `mathfont=serif` (default: `sans`) and looks like this:

$$e^{-\frac{a}{2}x^2} = \sqrt{\frac{1}{2\pi a}} \int_{-\infty}^{\infty} \mathrm{d}y\, e^{-\left(\frac{y^2}{2a}+iyx\right)}$$

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Demo of the `horizontal` style

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August 31, 2021

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A slide in `horizontal` **style**

This style is set up with

`\usetheme[slogan=norsk, style=horizontal]{NTNU}`

Here you can see that the `horizontal` style has a horizontal line in the footer with the logo in white and the name of the university on the title (see previous slide).

The slogan can be english or norwegian depending on the `slogan=` option, here it is set to `norsk`.

The slide number can also have the total number of slides setting `frametotal=true`, which is `false` (the default) here.

The font in math mode is here set by `mathfont=sans` (default) and looks like this:

$$e^{-\frac{a}{2}x^2} = \sqrt{\frac{1}{2\pi a}} \int_{-\infty}^{\infty} dy\, e^{-\left(\frac{y^2}{2a} + iyx\right)}$$

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Demo of the `vertical` style

Ronny Bergmann

August 31, 2021

A slide in `vertical` **style**

This style is set up with

`\usetheme[style=vertical, frametotal=true]{NTNU}`

Here you can see that the `vertical` style has a vertical line on the left with the logo in white and the name of the university on the title (see previous slide).

The slogan can be english or norwegian depending on the `slogan=` option. Here it is set to its default, `english`.

The slide number can also have the total number of slides setting `frametotal=true`, as you can see here (the default is `false`).

The font in math mode is here set by `mathfont=sans` (default) and looks like this:

$$\mathrm{e}^{-\frac{a}{2}x^2} = \sqrt{\frac{1}{2\pi a}} \int_{-\infty}^{\infty} \mathrm{d}y \, \mathrm{e}^{-\left(\frac{y^2}{2a} + iyx\right)}$$

Available options

You can load the theme using

`\usetheme{NTNU}`

where you have the following options available

Option	Default	Description
`displayframetotal`		the same as `frametotal=true`
`frametotal=true|false`	`false`	toggle display of total number of slides
`hideframetotal`		the same as `frametotal=false`
`slogan=english|norsk`	`norsk`	whether to use english or norsk slogan
`style= ...`	`plain`	styles, see (outer) themes on slide 7
`mathfont=sans|serif`	`sans`	font style in mathmode

Outer themes

The corporate design team provides four variants

(outer themes in latex beamer)

NTNUplain a very plain style (Default)
NTNUvertical with a stripe on the left (current)
NTNUhorizontal with a stripe at the bottom

They all three consist of an outer and an innter theme, but the easy way to activate these is the option

```
style=plain|vertical|horizontal
```

when loading the theme with

```
\usetheme{NTNU}
```

as shown on slide #5 and the following example slides.

titlelogo Set the logo on the title page. By default, it is set to the negative english or norsk logo (depending on the chosen slogan), see the slogan option, e.g.

`\titlelogo{ntnu_bredde_eng_neg.png}`

Special colors

NTNUblue (#00509e)
NTNULightblue (#6096d0)
NTNUOrange (#ef8114)
NTNUPink (#b01b81)
NTNUYellow (#f7d019)
NTNUViolet (#482776)
NTNUCyan (#3cbfbe)
NTNUOcher (#cfb887)
LightGrey (#bebebe)

Further configurations

Currently all 3 colors of `hyperref` are set to NTNUblue, i. e.

- ▶ `linkcolor` when referring to e. g. the demo slides slide #5 and following
- ▶ `urlcolor` when using URLs or hyperref links, for example when including this themes github page
- ▶ `citecolor` when citing literature like[1].

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[1]Donald E. Knuth. *The TeXbook*. Addison-Wesley, 1984.

Required packages

The following packages have to be installed for the theme to work

calc for a few computational tricks
ifthen to define some commands
pdftexcmds to define some commands
opensans for the font
tikz for some graphic tricks

This documentation further uses

booktabs for nice tables
listings for code highlighting
pdfpages to include the examples