

STHLMNORD BEAMER THEME [VERSION ROUND (PI, 3)]

Nord Inspired by Stockholm

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Institute: School in Stockholm

Course: Courses Title Goes Here

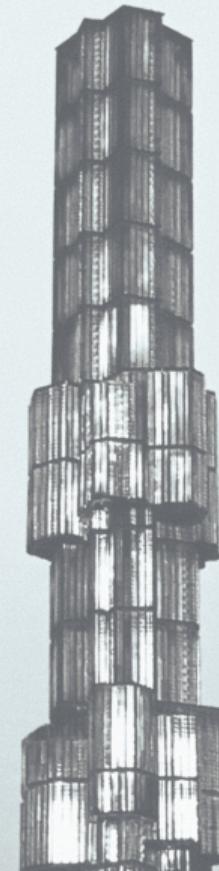
File: sthlmNordDarkDemo

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s t h i m
N O R D

A Beamer Deck Theme
*with an arctic, north-blueish
color palette.*



LATEX



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Please use Metropolis Theme Instead

Thank you for wanting to use sthlmNord version 3.

Warning Label

You really should consider using the Metropolis theme (mTheme) developed & maintained by Matthias Vogelgesang instead. It has been extensively tested, documented and available through CTAN.

<https://github.com/matze/mtheme>

Major Features

- ◎ Inspired by HSRM¹, mTheme² and Flux³.
- ◎ Color theme based on Arctic Ice Studio's Nord Color Theme.
- ◎ Libertinus sans-serif fonts compiled with XƎLATEX.
- ◎ Dark (default) and Light Themes available.

¹<https://github.com/benjamin-weiss/hsrmbeamertheme>

²<https://github.com/matze/mtheme>

³<https://github.com/pvanberg/flux-beamer>

A Brief History

The Original **sthlm** theme was created as pdflatex port of the unique **hsrm** theme designed by Benjamin Weiss along that included a more vibrant color scheme.

<https://github.com/benjamin-weiss/hsrmbeamertheme>

sthlm also borrowed heavily from **mTheme** for version 2. Version 3 has been rebuild with inspiration from the first two versions and the lesser known **Flux** theme created by Pierre-Olivier Vanberg.

<https://github.com/pvanberg/flux-beamer>

Version 3 is now called **sthlmNORD** and is being typeset once again using the \LaTeX engine.

Sorry ... No Guarantee

This is sharing to showcase. I have created `sthlmNORD` to template my slide decks and have shared the code for anyone who is interested in using it or modifying it to build their own decks.

No Guarantee!

Unfortunately, I **cannot** guarantee that any of `\LaTeX` style files that make up `sthlmNORD` theme are *error free, optimized, well written or if they will work in your production environment*. I would not consider myself a `\TeX`nician wizard, so you have been warned! Please use with extreme **CAUTION**.

Available on GitHub

This theme and all the documentation is hosted on GitHub

Download – Fork – Contribute

<https://github.com/mholson/sthlmNordBeamerTheme>



Figure: Hosted on GitHub

Packages

Table: Packages explicitly called by `sthlmNORD` theme.

tikz	ragged2e	metalogo	tabulararray	currfile
datetime	microtype	textcomp	unicode-math	libertinus-oft
mathtools	amssymb	siunitx	calc	cancel
cases	fontawesome5	diffcoeff	wasysym	xfrac
enumitem	verbatim	minted	cleveref	

Packages

The following custom packages make up the `sthlmNORDtheme`:

`beamerthemesthlmnord.sty` the main style file.

`mhcolorthemenor.sty` the style file that defines the nord color palette.

`mhomacros.sty` custom mathematics macros.

`mhotables.sty` setup tables for use with tabulararray pkg.

Nord Color Palette

POLAR NIGHT

SNOW STORM

FROST

AURORA

nord 0

nord 4

nord 7

nord 11

nord 1

nord 5

nord 8

nord 12

nord 2

nord 6

nord 9

nord 13

nord 3

nord 10

nord 14

nord 15

Polar Night

- ◎ text: \cDarkBlack{text} ∪ \cnordZero{text}
- ◎ : \cBlack{text} ∪ \cnordOne{text}
- ◎ text: \cDarkGrey{text} ∪ \cnordTwo{text}
- ◎ text: \cGrey{text} ∪ \cnordThree{text}

Polar Storm

- ◎ text: \cDivGrey{text} ∪ \cnordFour{text}
- ◎ text: \cLightGrey{text} ∪ \cnordFive{text}
- ◎ text: \cBGGrey{text} ∪ \cnordSix{text}

Polar Frost

- ◎ text: \cAquaBlue{text} ∪ \cnordSeven{text}
- ◎ text: \cLightBlue{text} ∪ \cnordEight{text}
- ◎ text: \cBlue{text} ∪ \cnordNine{text}
- ◎ text: \cDarkBlue{text} ∪ \cnordTen{text}

Polar Aurora

- ◎ text: \cRed{text} ∪ \cnordEleven{text}
- ◎ text: \cOrange{text} ∪ \cnordTwelve{text}
- ◎ text: \cYellow{text} ∪ \cnordThirteen{text}
- ◎ text: \cGreen{text} ∪ \cnordFourteen{text}
- ◎ text: \cPurple{text} ∪ \cnordFifteen{text}

Non-Nord Greens

- ◎ `text: \cDarkGreen{text}`
- ◎ `text: \cLightGreen{text}`

Polar Night

- ◎ `text : \hlDarkBlack{text}`
- ◎ `text : \hlBlack{text}`
- ◎ `text : \hlDarkGrey{text}`
- ◎ `text : \hlGrey{text}`

Polar Storm

- ◎ `text : \hlDivGrey{text}`
- ◎ `text : \hlLightGrey{text}`
- ◎ `text : \hlBGGrey{text}`

Polar Frost

- ◎ `text : \hlAquaBlue{text}`
- ◎ `text : \hlLightBlue{text}`
- ◎ `text : \hlBlue{text}`
- ◎ `text : \hlDarkBlue{text}`

Polar Aurora

- ◎ `text : \hlRed{text}`
- ◎ `text : \hlOrange{text}`
- ◎ `text : \hlYellow{text}`
- ◎ `text : \hlGreen{text}`
- ◎ `text : \hlPurple{text}`

Block Environments

Block Environment

Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

Example Environment

Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

Alert Environment

Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

Enumerated Lists

1. Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
2. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
 - 2.1 Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi.
 - 2.2 Morbi auctor lorem non justo.
3. Curabitur dictum gravida mauris.
4. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.

Itemized Lists

- ◎ Lorem ipsum dolor sit amet, consectetuer adipiscing elit.
 - ◎ Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
 - Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi.
 - ▷ Nulla malesuada porttitor diam.
 - ▷ Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.
 - Morbi auctor lorem non justo.
 - ◎ Curabitur dictum gravida mauris.
 - ◎ Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna.
-  **Remark:** This theme does not support more than three levels of itemized items; however, this could easily be expanded in the style file.

Description Lists

Definition 1 Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

Definition 2 Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis.

Using Minted for Code Documentation

The use of minted code highlighting can be activated by passing the `codehl` option to the `documentclass`

```
\documentclass[codehl]{beamer}
```

Warning

The Nord color style used by pygments needs to be installed from:

https://github.com/sbrisard/nord_pygments

Using Minted for Code Documentation

It might be nice to include some inline code \documentclass[opt]{name}

\documentclass[opt]{name}

\prob Solve the equation $\cos x = \frac{1}{2}$ for $0 \leq x \leq 2\pi$.

\soln A fantastic solution will follow.

Using Minted for Code Documentation

```
import os
import sys
import subprocess
import getpass
from pathlib import Path
import shortuuid
from datetime import datetime
from tabulate import tabulate
```

Example >_ Additional text goes here

 **Problem:** Include your problem here.

 **Solution:** A fantastic solution can be written here.

Theorem >_ Additional text goes here

Write your proposition here.

💡 **Proof:** Write a convincing proof here.

Fonts

- ◎ \textit : *The fast bulldog jumps the great happy wizard*
- ◎ \textbf : **The fast bulldog jumps the great happy wizard**
- ◎ \textsc : THE FAST BULLDOG JUMPS THE GREAT HAPPY WIZARD
- ◎ \rmfamily : The fast bulldog jumps the great happy wizard
- ◎ \texttt : The fast bulldog jumps the great happy wizard

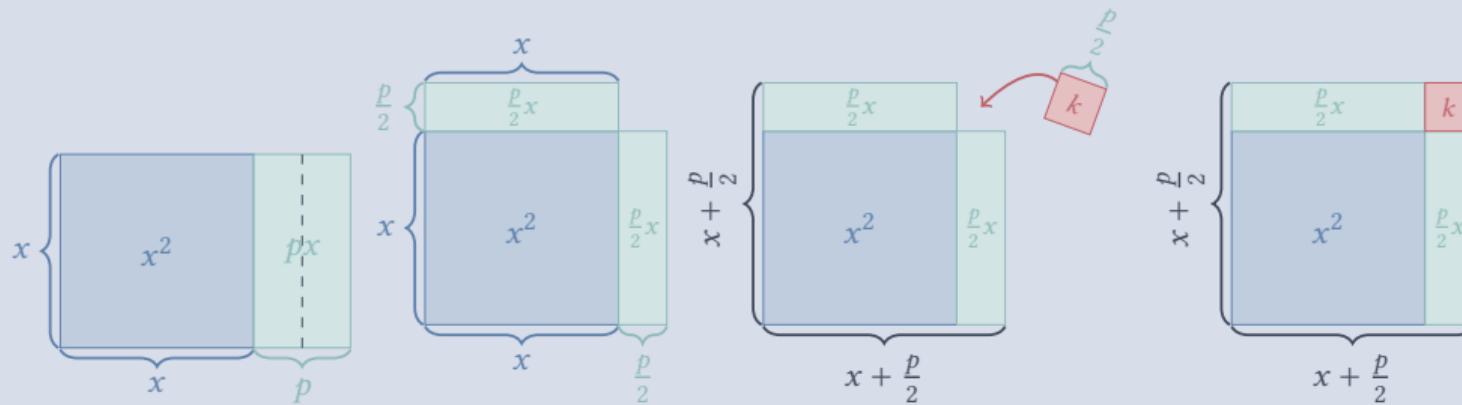
Typesetting Mathematics

Gaussian Probability Density Function

$$f(x | \mu, \sigma^2) = \frac{1}{\sqrt{2\sigma^2\pi}} e^{-\frac{(x - \mu)^2}{2\sigma^2}}$$

Including Graphics >_ Using TikZ

Completing The Square



Example >_ Expand & Simplify

 **Problem:** Expand and simplify $2(x - 3)^2 - 3(x + 1)^2$.

oxfordIGCSEext5th-C02-S04-E11-Q24[2] 

Example >_ Expand & Simplify

n Solution:

$$\begin{aligned}2(x - 3)^2 - 3(x + 1)^2 &= 2(x + -3)^2 + -3(x + 1)^2 \\&= \textcolor{brown}{2}[(x + -3)(x + -3)] + -3[(x + 1)(x + 1)] \\&= \textcolor{brown}{2}[x^2 + -6x + 9] + -3[x^2 + 2x + 1] \\&= \textcolor{brown}{2}(x^2) + \textcolor{brown}{2}(-6x) + \textcolor{brown}{2}(9) + -3(x^2) + -3(2x) + -3(1) \\&= 2x^2 + -12x + 18 + -3x^2 + -6x + -3 \\&= 2x^2 + -3x^2 + -12x + -3x + 18 + -3 \\&= -1x^2 + -18x + 15 \\&= -x^2 - 18x + 15\end{aligned}$$

Example >_ Completing The Square

🔥 **Problem:** Solve the equation $x^2 + 2x - 3 = 0$ by completing the square.

ma2c-5000-2022-Q2119a[1] 

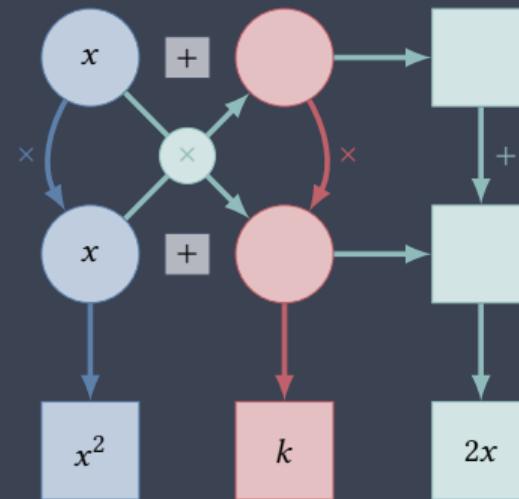
Example >_ Completing The Square

~ Solution:

$$x^2 + 2x - 3 = 0$$

$$x^2 + 2x + \textcolor{brown}{-} 3 = 0$$

$$x^2 + 2x + \textcolor{brown}{k} + \textcolor{brown}{-} k + \textcolor{brown}{-} 3 = 0$$



Example >_ Completing The Square

$$x^2 + 2x + \cancel{k} + \cancel{-3} = 0$$

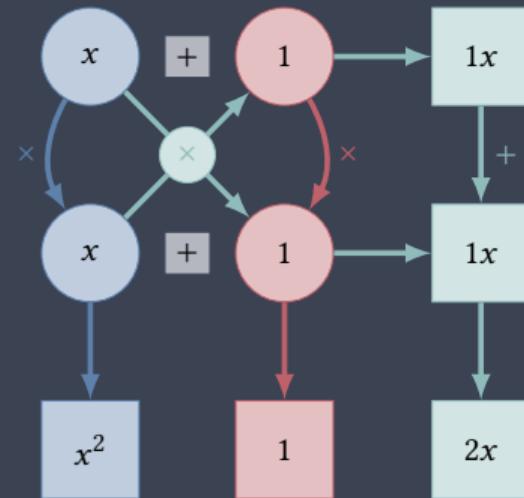
$$x^2 + 2x + 1 + \cancel{1} + \cancel{-3} = 0$$

$$(x + 1)^2 + \cancel{-4} = 0$$

$$(x + 1)^2 = 4$$

$$\sqrt{(x + 1)^2} = \sqrt{4}$$

$$|x + 1| = 2$$



Now we can consider both cases of $|x + 1|$.

Example >_ Completing The Square

Case I: Positive Case

$$x + 1 = 2$$

$$x = -1 + 2$$

$$= 1$$

Case II: Negative Case

$$-(x + 1) = 2$$

$$x + 1 = -2$$

$$x = -1 + -2$$

$$= -3$$

Probability >_ Dice and Coins

Dice

- Ⓐ , , , , ,
- Ⓑ , , , , ,
- Ⓒ , , , , ,
- Ⓓ , , , , ,

Coins

- Ⓐ ,
- Ⓑ ,
- Ⓒ ,
- Ⓓ ,

Sample Space Set Example

	1	2	3	4	5	6
	7	8	9	10	11	12
	13	14	15	16	17	18
	19	20	21	22	23	24
	25	26	27	28	29	30
	31	32	33	34	35	36

Sets >_ Well-Known

- | | | |
|---|---|---|
| ◎ $\{\}: \backslash set\{\}$ | ◎ $\mathbb{Z}: \backslash setZ$ | ◎ $\mathbb{Q}: \backslash setQ$ |
| ◎ $:: \suchthat$ | ◎ $\mathbb{Z}^+: \backslash setZp$ | ◎ $\mathbb{Q}^+: \backslash setQp$ |
| ◎ $\mathbb{U}: \backslash setU$ | ◎ $\mathbb{Z}^-: \backslash setZn$ | ◎ $\mathbb{Q}^-: \backslash setQn$ |
| ◎ $\$: \backslash setS$ | ◎ $\mathbb{Z}^*: \backslash setZs$ | ◎ $\mathbb{Q}^*: \backslash setQs$ |
| ◎ $\mathcal{C}: \backslash setComp$ | ◎ $\mathbb{Z}_{\geq 4}: \backslash setZi\{\geq 4\}$ | ◎ $\mathbb{Q}_{\geq 4}: \backslash setQi\{\geq 4\}$ |
| ◎ $\mathbb{N}: \backslash setN$ | ◎ $\mathbb{O}: \backslash setO$ | ◎ $\mathbb{R}: \backslash setR$ |
| ◎ $\mathbb{N}^*: \backslash setNs$ | ◎ $\mathbb{E}: \backslash setE$ | ◎ $\mathbb{R}^+: \backslash setRp$ |
| ◎ $\mathbb{N}_{\geq 4}: \backslash setNi\{\geq 4\}$ | ◎ $\mathbb{P}: \backslash setP$ | ◎ $\mathbb{R}^-: \backslash setRn$ |
| ◎ $\mathbb{W}: \backslash setW$ | ◎ $\mathbb{Z}_{n^2}: \backslash setSquare$ | ◎ $\mathbb{R}^*: \backslash setRs$ |
| | ◎ $\mathbb{Z}_{n^3}: \backslash setCubes$ | ◎ $\mathbb{R}_{\geq 4}: \backslash setQi\{\geq 4\}$ |
| | | ◎ $\mathbb{C}: \backslash setR$ |

References

- [1] Lena Alfredsson and Hans Heikne. *Matematik 5000+ Kurs 1b Lärobok Digital*. OCLC: 1251871262. 2021. ISBN: 978-91-27-45820-8.
- [2] David Rayner. *Complete mathematics for Cambridge IGCSE: Extended*. Fifth edition. Aspire succeed progress. Oxford: Oxford University Press, 2018. 493 pp. ISBN: 978-0-19-842507-6.