



UNIVERSITÉ DU LUXEMBOURG  
Mathematics Research Unit (RMATH)

Your subtitle (Talk @ etc.)

## minflat Beamer Theme

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# Introduction



## minflat

The *minflat* theme is a Beamer theme in modern flat design, i.e. emphasising a minimal yet functional design, primarily designed for mathematical talks.

You can enable the theme by loading:

```
\documentclass{beamer}  
\usetheme{minflat}
```

Note that XeTeX and the free Museo Sans 300 font need to be installed. Moreover this theme requires that the following packages are installed:

- *tikz*
- *datetime2*

# Design

You can choose between two color schemes. A **blue violet** and a **red purple** variant. Corresponding colours used are green for the **progress bar** (and **examples**) and orange for **alert elements** (cf. below).

Sections always start showing an overlay slide containing the section name and a nice progress bar.

All slides have a progress bar on top where the current section is indicated by highlighted green blob and a slightly bolder name.

The date uses the `datetime2` package so you can change the format if you wish. You should replace the logo on the title page with our own by setting the appropriate path or just comment out with no harm. At the moment I am a PhD student (Assistant-doctorant) at the University of Luxembourg.

## Theme Options & Remarks

Option	Description
purple	switch to <b>red purple</b> colour scheme
xcolor=table	should be activated to colour tables
notheorems	should be activated to use the dummyblock definition

Note that if you use the

```
\usepackage{pgfpages}  
\setbeameroption{show notes on second screen=right}  
\setbeamertemplate{note page}[compress]
```

to enable notes on the second screen there is a bug in beamer that normal text on frames becomes white. So I added a **dummyblock** wrapper to solve this issue.

## Blocks, Alerts & Math Environments



## Blocks, Alerts & Math Environments

### Notation

This is some notation.

### Definition

This is a definition.

### Remark

And this is a remark.



## Theorem (Existence & Uniqueness for ...)

*A theorem is important so it should be emphasised!*

## Proposition

*A proposition may be a little less important but it's also worth emphasising!*

In the same way we can create lemmata & corollaries.

## Example

Examples should be made. Of course normally only the mathematician understands why this text on the blackboard should be an example.

Finally

## Alert, alert

An alert block has a catchy colour.

## Red purple colour scheme

Finally let us have a look at the second colour scheme:

Theorem (Existence & Uniqueness for ...)

*A theorem is important so it should be emphasised!*

Example

Examples should be made. Of course normally only the mathematician understands why this text on the blackboard should be an example.

Alert, alert

An alert block has a catchy colour.

## Overlays & Images



## Overlays & Images

Complying with the old saying: “A picture speaks a thousand words”, we can create frames which only contain a picture by

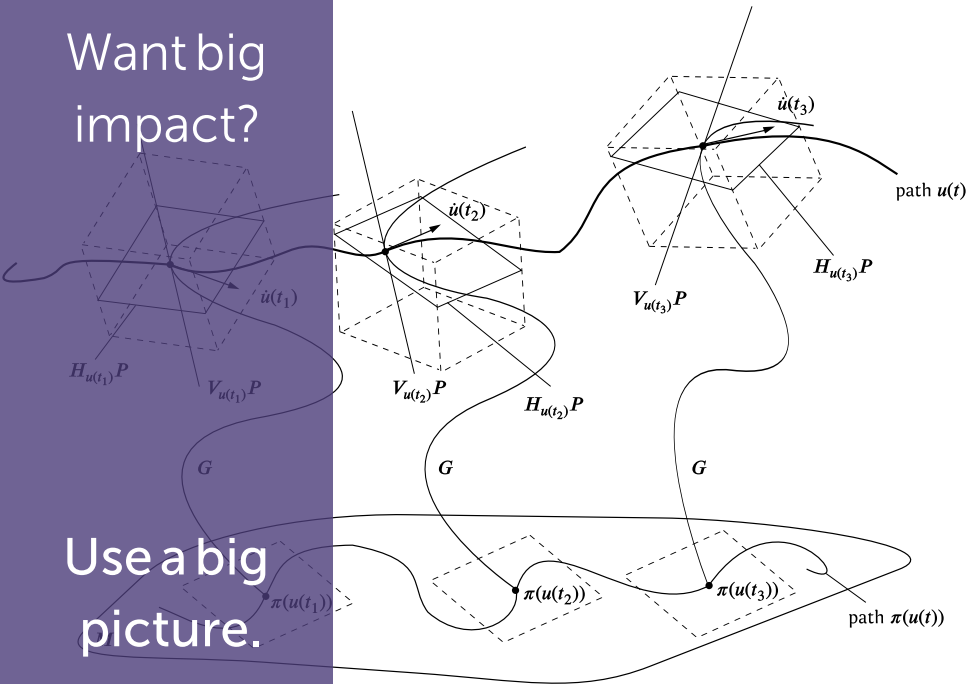
```
\imageFrame{imageURL}.
```

We can also define an overlay on the left oder right side of the frame. By default the overlay has a width of 150pt. We can adjust as an optional argument.

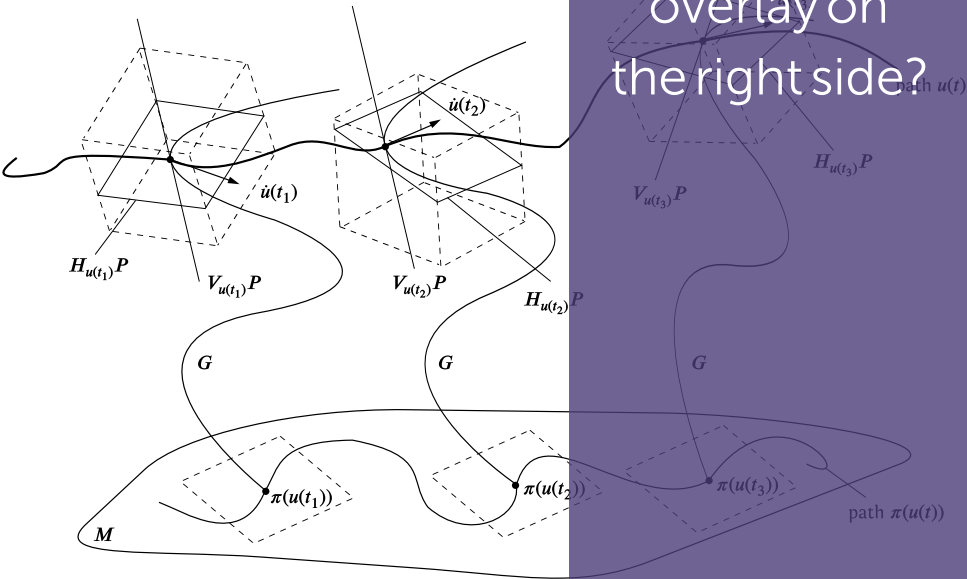
```
\imageFrameOverlayLeft[optional width]{%  
  ./gfx/horizontallift.pdf}{%  
  Want big impact?}{%  
  Use a big picture.}
```

Want big  
impact?

Use a big  
picture.



Need a bigger  
overlay on  
the right side?



Listings, Tables, Highlighted Text & Tikz





## Listings

- Item #1
- Item #2
  - Subitem 2.#1
  - Subitem 2.#2

and so on. We can also create highlighted lists:

- Hi!
- you

# Listings

- Item #1
- Item #2
  - Subitem 2.#1
  - Subitem 2.#2

and so on. We can also create highlighted lists:

- Hi!
- you
- there!

# Listings

- Item #1
- Item #2
  - Subitem 2.#1
  - Subitem 2.#2

and so on. We can also create highlighted lists:

- Hi!
- you
- there!

# Listings

- Item #1
- Item #2
  - Subitem 2.#1
  - Subitem 2.#2

and so on. We can also create highlighted lists:

- or here?
- you
- there!

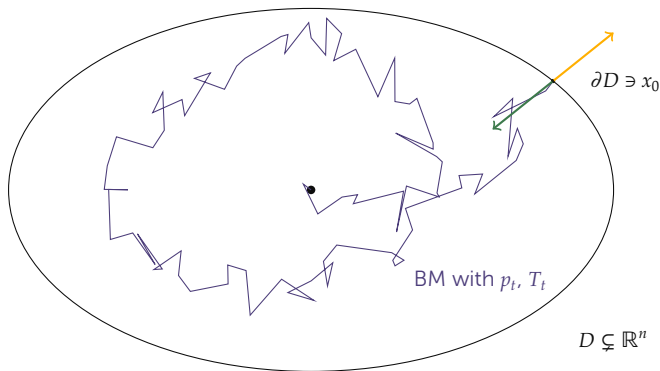
# Tables

	Dual space	Reflexive	Norm
$\mathbb{K}^n$	$\mathbb{K}^n$	Yes	$\ x\ _2 = \left(\sum_{i=1}^n  x_i ^2\right)^{\frac{1}{2}}$
$\ell_p$	$\ell_q$	Yes	$\ x\ _p = \left(\sum_{i=1}^{\infty}  x_i ^p\right)^{\frac{1}{p}}$
$\ell_1$	$\ell_{\infty}$	No	$\ x\ _1 = \sum_{i=1}^{\infty}  x_i $
$\ell_{\infty}$	complicated	No	$\ x\ _{\infty} = \sup_i  x_i $
$L^p(\mu)$	$L^q(\mu)$	Yes	$\ f\ _p = \left(\int  f ^p d\mu\right)^{\frac{1}{p}}$
$L^1(\mu)$	$L^{\infty}(\mu)$	No	$\ f\ _1 = \int  f  d\mu$

89.432.567

such an impressive number should be big!

# Tikz



- Trap,  $x_0$  absorbing = Killing Brownian motion = Dirichlet problem
- Reflected Brownian motion = Neumann problem
- Wait an go on = Sticky Brownian motion

Thank you. Questions?





## Conclusion

Let me close addressing some thanks for the inspiration to the metropolis mtheme. This theme and its sources & demo are completely hosted by

`https://github.com/vipowueb/minflat-beamer`

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