Beamer example
Usage of the theme MathDept

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Theorem (Fermat’s little theorem)

For a prime \( \omega \in \hat{G} \)

Proof.

The invertible elements in a field form a group under multiplication. In particular, the elements

\[
1, 2, \ldots, p - 1 \in \mathbb{Z}_p
\]

form a group under multiplication modulo \( p \). This is a group of order \( p - 1 \). For \( a \in \mathbb{Z}_p \) and \( a \neq 0 \) we thus get \( a^{p-1} = 1 \in \mathbb{Z}_p \). The claim follows.

\[\square\]
Example

The function \( \varphi : \mathbb{R} \to \mathbb{R} \) given by \( \varphi(x) = 2x \) is continuous at the point \( x = \alpha \), because if \( \epsilon > 0 \) and \( x \in \mathbb{R} \) is such that \( |x - \alpha| < \delta = \frac{\epsilon}{2} \), then

\[
|\varphi(x) - \varphi(\alpha)| = 2|x - \alpha| < 2\delta = \epsilon.
\]
Highlighting

Some times it is useful to **highlight** certain words in the text.

**Important message**

If a lot of text should be **highlighted**, it is a good idea to put it in a box.

It is easy to match the **colour theme**.
Lists

- Bullet lists are marked with a grey box.

1. Numbered lists are marked with a white number inside a grey box.

Description highlights important words with grey text.

Example

- Lists change colour after the environment.
Effects

1 Effects that control

Use textblock for arbitrary placement of objects.
Effects

1. Effects that control when text is displayed

Use \textblock{} for arbitrary placement of objects.

Theorem

This theorem is only visible on slide number 2.
Effects

1. Effects that control
2. when text is displayed
3. are specified with <> and a list of slides.

Use `textblock` for arbitrary placement of objects.
Effects

1. Effects that control when text is displayed are specified with <> and a list of slides.

Use **textblock** for arbitrary placement of objects.
Effects

1. Effects that control when text is displayed are specified with <> and a list of slides.

Use **textblock** for arbitrary placement of objects.

It creates a box with the specified width (here in a percentage of the slide’s width) and upper left corner at the specified coordinate \((x, y)\) (here \(x\) is a percentage of width and \(y\) a percentage of height).
References I

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*Algebraic Geometry.*  

M. Artin.  
On isolated rational singularities of surfaces.  

R. Vakil.  
http://arxiv.org/abs/math/0602347

M. Atiyah og I. Macdonald.  
*Introduction to commutative algebra.*  

A first course in abstract algebra.
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