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November 26th, 2018

Outline

- 1. Introduction
- 2. Beamer Basic
 - Hightlight
 - Other Environments
- 3. Beamer More
 - Split Screen
 - Table
 - Math

-Introduction

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Latex and Beamer

LaTeX is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation.

Introduction

Latex and Beamer

LaTeX is a high-quality typesetting system; it includes features designed for the production of technical and scientific documentation.

Beamer is a LaTeX class to create powerful, flexible and nice-looking presentations and slides. The beamer class is focussed on producing (on-screen) presentations, along with support material such as handouts and speaker notes. Beamer Basic

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– Beamer Basic

└─ Hightlight

Block and Alert

Pythagorean theorem

$$a^2 + b^2 = c^2$$

where c represents the length of the hypotenuse and a and b the lengths of the triangle's other two sides.

Remark

- the environment above is **block**
- the environment here is alertblock

—Beamer Basic

Hightlight

Proof

Pythagorean theorem

$$a^2 + b^2 = c^2$$

Proof.

$$3^2 + 4^2 = 5^2$$

 $5^2 + 12^2 = 13^2$

-Beamer Basic

└─Other Environments

Algorithm

```
Data: this text

Result: how to write algorithm with LATEX2e

initialization;

while not at end of this document do

read current;

if understand then

go to next section;

current section becomes this one;

else

go back to the beginning of current section;

end
```

end

Algorithm 1: How to write algorithms (copied from here)

Beamer Basic

Other Environments

An Algorithm For Finding Primes Numbers.

```
int main (void)
{
    std::vector<bool> is_prime (100, true);
    for (int i = 2; i < 100; i++)
    if (is_prime[i])
    {
        std::cout << i << " ";
        for (int j = i; j < 100; is_prime [j] = false, j+=i);
    }
    return 0;
}</pre>
```

Note the use of \alert .

Beamer Basic

└─Other Environments

More

More environments such as

- Definition
- lemma
- corollary
- example

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Beamer More

└─Split Screen

Minipage





-Beamer More

Split Screen

Columns

This is a text in first column.

$$E = mc^2$$

• First item

Second item

first block

columns achieves splitting the screen

second block stack block in columns

Beamer More

└─ _{Table}

Create Tables

| first | second | third |
|-------|--------|-------|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |

| Beamer Th | neme |
|-----------|------|
|-----------|------|

−Beamer More ∟_{Math}

Equation1

A matrix in text must be set smaller: $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$ to not increase leading in a portion of text.

$$f(n) = \begin{cases} n/2 & \text{ if } n \text{ is even} \\ -(n+1)/2 & \text{ if } n \text{ is odd} \end{cases}$$

 $50 apples \times 100 apples = lots of apples^2$

└─Beamer More └─Math

Equation2

$$\begin{split} \sum_{\substack{0 < i < m \\ 0 < j < n}} P(i,j) &= \int_{a}^{b} \prod P(i,j) \\ P\left(A &= 2 \left| \frac{A^2}{B} > 4 \right) \\ (a), [b], \{c\}, |d|, ||e||, \langle f \rangle, \lfloor g \rfloor, \lceil h \rceil, \lceil i \rceil \end{split}$$

Beamer More

Equation3

$$Q(\alpha) = \alpha_i \alpha_j y_i y_j (x_i \cdot x_j)$$

$$Q(\alpha) = \alpha^{i} \alpha^{j} y^{(i)} y^{(j)} (x^{i} \cdot x^{j})$$

$$\Gamma=\beta+\alpha+\gamma+\rho$$

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Conclusion

End

The last page.