### Brief Introduction to the Beamer Class

A Primer on Making Awesome Presentations

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### Table of Contents

1. First Section

2. Second Section

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2. Second Section

# First Frame Title Subtitle pertaining to the first frame.

Frame contents.



### Second Frame Title Subtitle pertaining to the second frame.

Some important text will be highlighted because it's important.

#### Block Box

The text contained inside this block serves some purpose.

### Table of Contents

1. First Section

2. Second Section



## Third Frame Title Subtitle pertaining to the third frame.

This frame contains a figure.



Figure 2.1: A funny picture.

### Fourth Frame Title Subtitle pertaining to the fourth frame.

The Dirac delta can be loosely thought of a function on the real line which is zero everywhere except at the origin, where it is infinite:

$$\delta(x) = \begin{cases} +\infty, & x = 0\\ 0, & x \neq 0, \end{cases}$$
 (2.1)

and which is also constrained to satisfy the identity

$$\int_{\mathbb{D}} \delta(x) \ dx = 1. \tag{2.2}$$



Figure 2.2: A cute picture.

## Fifth Frame Title Subtitle pertaining to the fifth frame.

Here is some text in the first column. A famous equation is written below.

$$\frac{1}{c^2}\frac{\partial^2}{\partial t^2}\psi - \nabla^2\psi + \frac{m^2c^2}{\hbar^2}\psi = 0.$$

This text will be in the second column.

- First list item
- Second list item
- Third list item

### Sixth Frame Title Subtitle pertaining to the sixth frame.

Consider some  $A \in \mathbb{R}^{p \times q}$  and  $B \in \mathbb{R}^{q \times p}$ . We can represent these matrices as

$$A = \begin{pmatrix} a_{11} & a_{12} & \cdots & a_{1q} \\ a_{21} & a_{22} & \cdots & a_{2q} \\ \vdots & \vdots & \ddots & \vdots \\ a_{p1} & a_{p2} & \cdots & a_{pq} \end{pmatrix} \quad \text{and} \quad B = \begin{pmatrix} b_{11} & b_{12} & \cdots & b_{1p} \\ b_{21} & a_{22} & \cdots & b_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ b_{q1} & b_{q2} & \cdots & b_{qp} \end{pmatrix}$$

respectively. Then the product AB can be written

$$AB = \begin{pmatrix} a_{11}b_{11} + \dots + a_{1q}b_{q1} & a_{11}b_{12} + \dots + a_{1q}b_{q2} & \dots & a_{11}b_{1p} + \dots + a_{1q}b_{qp} \\ a_{21}b_{11} + \dots + a_{2q}b_{q1} & a_{21}b_{12} + \dots + a_{2q}b_{q2} & \dots & a_{21}b_{1p} + \dots + a_{2q}b_{qp} \\ \vdots & \vdots & \ddots & \vdots \\ a_{p1}b_{11} + \dots + a_{pq}b_{q1} & a_{p1}b_{12} + \dots + a_{pq}b_{q2} & \dots & a_{p1}b_{1p} + \dots + a_{pq}b_{qp} \end{pmatrix}.$$