Brief Introduction to the Beamer Class

A Primer on Making Awesome Presentations

Nicholas D. Kostin

05 April 2022

Table of Contents

1. First Section

2. Second Section

Table of Contents

1. First 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 is incredibly important. In a cosmic sense, it may also be funny.

Table of Contents

This frame contains a figure.

Figure 2.1: A funny picture.

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:

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

and which is also constrained to satisfy the identity

$$\int_{\mathbb{R}} \delta(x) \, dx = 1. \qquad (2.2)$$

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

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

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