

1 Start

analysis

equations

$$|y - x| < \delta$$

$$|y - x| < \epsilon$$

KL divergence

$$KL(p||q) = \sum_{k=1}^n p_k \log \frac{p_k}{q_k}$$

2 Characters and Control Sequences

→

→

3 Quotation Marks and Dashes

'Single Quotation'

“double Quotation”

'dashes 1 – '

'dashes 2 — '

4 Change Font in text Mode

hello

hello

hello

hello

hello

hello

5 Text Embedded in Displayed Equations

$$y = ax + b \text{ for all } x \in R$$

6 Fractions

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

7 Three dots

$$f(x_1, x_2, x_3, \dots, x_n) = x_1^2 + x_2^2 + x_3^2 + \dots + x_n^2$$

8 Brackets and Norms

$$\|f\| = \{K \in [0, +\infty) : |f(x)| \leq K\|x\| \text{ for all } x \in X\}.$$

9 Matrices and arrays

$$\chi(\lambda) = \begin{vmatrix} \lambda - a & -b & -c \\ -d & \lambda - e & -f \\ -g & -h & \lambda - i \end{vmatrix}$$

10 Derivatives and Integrals

$$\frac{\partial u}{\partial t} = \frac{\partial^2 u}{\partial^2 x} + \frac{\partial^2 u}{\partial^2 y} + \frac{\partial^2 u}{\partial^2 z}$$
$$\int_0^{+\infty} x^n e^{-x} dx = n!$$

11 Lists using enumerate, itemsize,description

1. enumerate 1
2. enumerate 2
 - itemsize 1
 - itemsize 2

caffe caffe

caffe2 caffe2

mxnet mxnet

12 Pre-Formatted Text

```
python code
for i in range(10):
    print i
```

13 Table

n	value
1	1
2	2
3	6
4	24

14 Defining our own Control Sequences

$$\int_{-\infty}^{+\infty} f(x)dx$$