CUHK Beamer Template

Sample Slides

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Itemize Tests

- One: *Two* **Three**
  1. l e t t e r s p a c i n g
  2. underlining
  3. ~~striking out~~
  4. highlighting
  5. CAPITALS, Small Capitals
- Test Test Test

Multi-Columns

All human things are subject to decay. And when fate summons, Monarchs must obey.

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there...

Plot Test

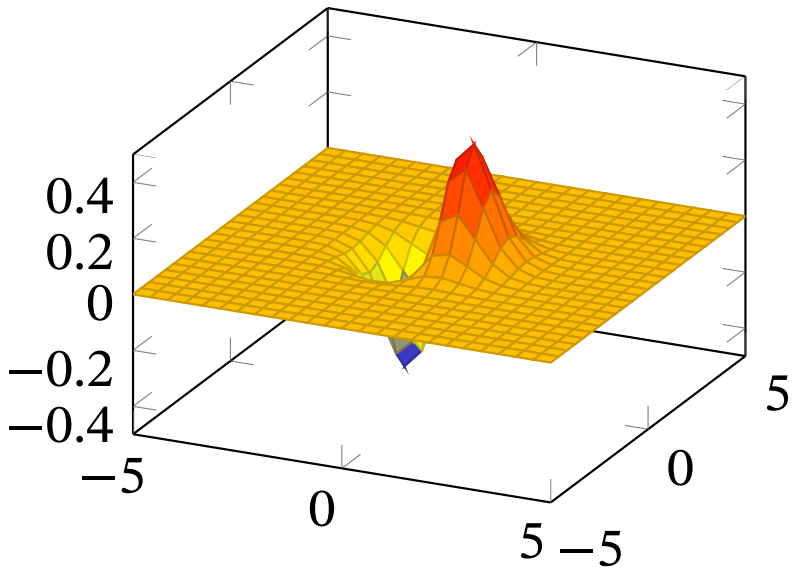

Figure: Plot $z = x(-x^2 - y^2)$

中文测试中文測試

- 这是简体中文這是繁體中文: **加粗** + 下划线下劃線 + 斜体斜體
  - 这是第二层
  - 這是第二層

Citation Tests

- Yao's Millionaires' problem[1]

[1] Yao, "Protocols for Secure Computations".

Algorithm Test

Algorithm 1: Basic algorithm for Abstract Interpretation

Input: Control Flow Graph: CFG
Output: Invariant: $State$

initialization:
  $State[n] \leftarrow \top$ if $n = \texttt{Entry}(CFG)$
  $State[n] \leftarrow \bot$ otherwise
$WorkList \leftarrow \texttt{Entry}(CFG)$
while $WorkList$ *is not empty* **do**
    $WorkList \leftarrow WorkList \backslash \{n\}$
    $new\_state \leftarrow \texttt{Transfer}(State[n])$
    foreach $succ \in \texttt{Successors}(CFG, n)$ **do**
        if $new\_state \not\sqsubseteq State[succ]$ **then**
            $State[succ] \leftarrow State[succ] \sqcup new\_state$
            $WorkList \leftarrow WorkList \cup \{succ\}$

Code Test

```
1  fn main() {
2      println!("Hello World!");
3  }
```

- Inline code is also supported: `fn main() { }`

Math Test

1. Symbols: $\alpha, \beta, \gamma, \delta, \epsilon, \varepsilon, \zeta, \eta, \theta, \vartheta, \iota, \kappa, \lambda, \nu, \xi, \varpi, \rho, \varrho, \sigma, \varsigma, \tau, \upsilon, \phi, \varphi, \chi, \psi, \omega$;
2. Symbols: $f'', \sqrt{a}, \vec{a}, \subseteq, \supseteq$

$$\int, \iint, \iiint, \iiiint, \oint$$

3. Complex equation:

$$\lim_{x\to 0^+}\lim_{y\to+\infty}\frac{\displaystyle\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{n}\sum_{m=0}^{\infty}\frac{1}{n2^m+1}\int_0^{x^2}\frac{\pi\left(\sqrt[4]{1+t}-1\right)\sin t^4}{\displaystyle\sum_{n=1}^{\infty}\frac{((n-1)!)^2(2t)^{2n}}{(2n)!}\int_0^1\frac{(1-2x)\ln(1-x)}{x^2-x+1}\mathrm{d}x}\mathrm{d}x}{x^2(x-\tan x)\ln(x^2+1)\left[\left(\dfrac{2\arctan\frac{y}{x}}{\pi}\right)^y-1\right]}=\frac{27}{32}$$

Theorem/Lemma/Corollary/Proof

Fancy style theorem:

Theorem 1: Pythagorean Theorem

For a right triangle with legs a and b and hypotenuse c,

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

This is a reference to Theorem 1.
Normal style theorem:

Theorem (Fixed-point Theorem)

In a lattice L with finite height, every monotone function $f : L \to L$ has a unique least fixed-point denoted $fix(f)$ defined as:

$$fix(f) = \bigsqcup_{i \geq 0} f^i(\bot)$$

Theorem/Lemma/Corollary/Proof

Lemma (Lemma Name)

$x + y = y + x$

Corollary (Corollary Name)

There's no right rectangle whose sides measure 3cm, 4cm, and 6cm.

Proof (Theorem 1).

$\omega + \phi = \epsilon$ □

Thank You

References

Yao, Andrew C. "Protocols for Secure Computations". In: *Proceedings of the 23rd Annual Symposium on Foundations of Computer Science*. SFCS '82. USA: IEEE Computer Society, 1982, pp. 160–164.