A Minimal Template: Demonstration of LaTeX Environments

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Abstract

This is a sample abstract.

1 Introduction

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1.1 Sample Equation

Consider the following equation:

$$\int_{\Omega} u(x)\,\mathrm{d}x = 0. \tag{1}$$

2 Mathematical Environments

Theorem 2.1 (Sample Theorem)**.** *Let $x \in \mathbb{R}$. Then for all x, we have $|x| \geq 0$.*

Proof. Trivially, by the definition of absolute value. □

Lemma 2.2 (Sample Lemma)**.** *For any $a, b \in \mathbb{R}$, $|a + b| \leq |a| + |b|$.*

Proposition 2.3 (Sample Proposition)**.** *If $x > 1$, then $x^2 > 1$.*

Corollary 2.4 (Sample Corollary)**.** *If $x > 1$, then $x^4 > 1$.*

Definition 2.5 (Sample Definition)**.** A set S is *bounded* if there exists $M > 0$ such that $|x| < M$ for all $x \in S$.

Remark 2.6. *This is a remark. Lorem ipsum dolor sit amet, consectetur adipiscing elit.*

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3 Figures and Tables

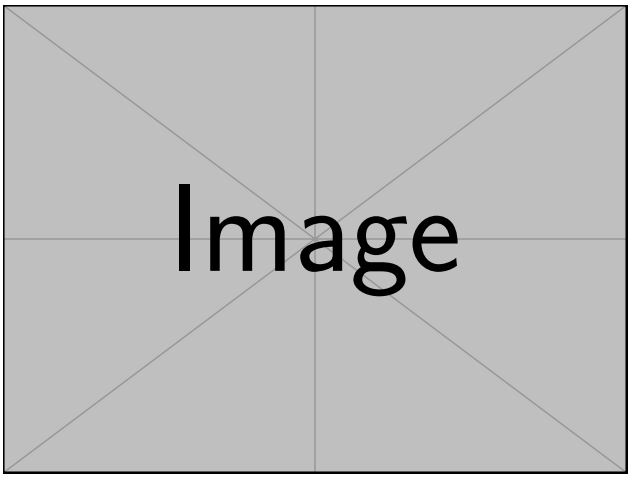

Figure 1: A sample figure using the default image.

Method	Accuracy	Time (s)
A	95%	1.23
B	93%	0.98

Table 1: Sample comparison table.

4 Citation Example

As shown in Theorem 2.1, the absolute value is always non-negative.

5 Conclusion

Lorem ipsum dolor sit amet. Suspendisse nec luctus dui.

References

[1] Qiang Du, Lili Ju, Xiao Li, and Zhonghua Qiao. Maximum bound principles for a class of semi-linear parabolic equations and exponential time-differencing schemes. *SIAM Rev.*, 63(2):317–359, 2021.