

How to use `sutj.cls`

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Abstract. The manuscripts for SUT Journal of Mathematics should be prepared using the journal class file `sutj.cls`. This paper explains how use the class file `sutj.cls`. The source file of this pdf contains comments on each entry and can be used for a sample file. If you have any question on this file, please contact the editor-in-chief of the journal.

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§1. Introduction

To submit a paper to SUT Journal of Mathematics, it is preferable to prepare the manuscript using `sutj.cls`. This file explains how to use it.

The environments Theorem, Proposition, Lemma, Corollary, Definition, Example, and Remark are already defined. Please use as they are.

Theorem 1.1. *The series*

$$\zeta(s) = \sum_n \frac{1}{n^s}$$

converges absolutely on the half plane $\Re(s) > 1$.

Proof. To write a proof, use the proof environment. □

Definition 1.2. The function $\zeta(s)$ in Theorem 1.1 is called the *Riemann zeta function*.

Example 1.3. It is known that $\zeta(2) = \pi^2/6$. Other special values at even positive integers are also known. To obtain these formulas, one uses the infinite product expression of $\sin z$:

$$(1.1) \quad \sin z = z \prod_{n=1}^{\infty} \left(1 - \frac{z^2}{n^2\pi^2}\right).$$

The reference to the equation is like (1.1).

Remark 1.4. The function $\zeta(s)$ has an analytic continuation on the whole complex plain.

References citations are like [2, Theorem V.2.1] and [1].

A commutative diagram can be written by `xymatrix`:

$$\begin{array}{ccccccc}
 \cdots & \xrightarrow{d_{i+j+1}} & A_{i+j} & \xrightarrow{d_{i+j}} & \cdots & \xrightarrow{d_{j+2}} & A_{j+1} & \xrightarrow{d_{j+1}} & A_j & & \\
 & & \sigma_i \downarrow & & & & \sigma_1 \downarrow & & \sigma_0 \downarrow & \searrow \psi & \\
 \cdots & \xrightarrow{d_{i+1}} & A_i & \xrightarrow{d_i} & \cdots & \xrightarrow{d_2} & A_1 & \xrightarrow{d_1} & A_0 & \xrightarrow{\pi} & A/J^l \longrightarrow 0,
 \end{array}$$

Formulas in multiple lines are better typeset using `align*` (or commands alike) than obsolete `eqnarray`:

$$\begin{aligned}
 f(x) &= \cos x, \\
 g(x) &= \exp x.
 \end{aligned}$$

Acknowledgments

Your grant information should be included here.

References

- [1] E. Hecke, Zur Theorie der elliptischen Modulfunktionen, *Math. Ann.* **97** (1926), no. 1, 210–242.
- [2] J. Neukirch, *Algebraic number theory*, Grundlehren der Mathematischen Wissenschaften, vol. 322, Springer-Verlag, Berlin, 1999.

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