

Standard L^AT_EX Article

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Abstract

We study the effects of warm water on the local penguin population. The major finding is that it is extremely difficult to induce penguins to drink warm water. The success factor is approximately $-e^{-i\pi} - 1$.

1 Standard L^AT_EX Article

This document illustrates the appearance of an article created with the shell Standard LaTeX Article or the shell Blank - Standard LaTeX Article. Both shells produce documents with centered title information, left-justified headings, theorem environments, and appendices.

The standard L^AT_EX shells provide the most general and portable set of document features. You can achieve almost any typesetting effect by beginning with a standard shell and adding L^AT_EX packages as necessary.

The document class base file for this shell is article.cls. This typesetting specification supports a number of class options. To see the available class options, choose Typeset, choose Options and Packages, select the Class Options tab, and then click the Modify button. This shell uses the default class options.

The typesetting specification for this shell document uses these options and packages with the defaults indicated:

Options and Packages	Defaults
Document class options	Standard
Packages:	
amsfonts	None
amsmath	Standard

2 Using This Shell

The front matter of this shell has a number of sample entries that you should replace with your own. Replace the body of this document with your own text. To start with a blank document, delete all of the text in this document.

Changes to the typeset format of this shell and its associated $\LaTeX$ formatting file (article.cls) are not supported by MacKichan Software, Inc. If you want to make such changes, please consult the $\LaTeX$ manuals or a local $\LaTeX$ expert.

If you modify this document and export it as “Standard LaTeX Article.shl” in the Shells\Standard LaTeX directory, it will become your new Standard LaTeX Article shell.

3 Headings and Tags

3.1 Subsection

Use the Section tag for major sections, and the Subsection tag for subsections.

3.1.1 Subsubsection

This is just some harmless text under a subsubsection.

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3.2 Tags

You can apply the logical markup tag Emphasized.

You can apply the visual markup tags Bold, Italics, Roman, Sans Serif, Slanted, Small Caps, and Typewriter.

You can apply the special mathematics-only tags *BLACKBOARD BOLD*, *CALLIGRAPHIC*, and *fraktur*. Note that blackboard bold and calligraphic are correct only when applied to uppercase letters A through Z.

You can apply the size tags tiny, scriptsize, footnotesize, small, normalsize, large, Large, LARGE, huge and Huge.

This is a Body Math paragraph. Each time you press the Enter key, Scientific WorkPlace switches to mathematics mode. This is convenient for carrying out “scratchpad” computations.

Following is a group of paragraphs marked as Short Quote. This environment is appropriate for a short quotation or a sequence of short quotations.

The only thing we have to fear is fear itself. Franklin D. Roosevelt,
Mar. 4, 1933

Ask not what your country can do for you; ask what you can do for
your country. John F. Kennedy, Jan. 20. 1961

There is nothing wrong with America that cannot be cured by what is
right with America. William J. “Bill” Clinton, Jan. 21, 1993

The Long Quotation tag is used for quotations of more than one paragraph. Following is the beginning of Alice's Adventures in Wonderland by Lewis Carroll:

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, 'and what is the use of a book,' thought Alice 'without pictures or conversation?'

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.

There was nothing so very remarkable in that; nor did Alice think it so very much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually took a watch out of its waistcoat-pocket, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

In another moment down went Alice after it, never once considering how in the world she was to get out again.

Use the Verbatim tag when you want L^AT_EX to preserve spacing, perhaps when including a fragment from a program such as:

```
\textsf{\#include <iostream>           // < > is used for standard libraries.
}
\textsf{void main(void)                // "main" method always called first.
}
\textsf{{
}
\textsf{ cout << "Hello World."; // Send to output stream.
}
\textsf{}
}
```

4 Mathematics and Text

Let H be a Hilbert space, C be a closed bounded convex subset of H , T a non-expansive self map of C . Suppose that as $n \rightarrow \infty$, $a_{n,k} \rightarrow 0$ for each k , and

$\gamma_n = \sum_{k=0}^{\infty} (a_{n,k+1} - a_{n,k})^+ \rightarrow 0$. Then for each x in C , $A_n x = \sum_{k=0}^{\infty} a_{n,k} T^k x$ converges weakly to a fixed point of T .

The numbered equation

$$u_{tt} - \Delta u + u^5 + u|u|^{p-2} = 0 \text{ in } \mathbf{R}^3 \times [0, \infty[\quad (1)$$

is automatically numbered as equation 1.

5 List Environments

You can create numbered, bulleted, and description lists using the Item Tag popup list on the Tag toolbar.

1. List item 1

2. List item 2

(a) A list item under a list item.

The typeset style for this level is different than the screen style. The screen shows a lower case alphabetic character followed by a period while the typeset style uses a lower case alphabetic character surrounded by parentheses.

(b) Just another list item under a list item.

i. Third level list item under a list item.

A. Fourth and final level of list items allowed.

• Bullet item 1

• Bullet item 2

– Second level bullet item.

* Third level bullet item.

· Fourth (and final) level bullet item.

Description List Each description list item has a term followed by the description of that term. Double click the term box to enter the term, or to change it.

Bunyip Mythical beast of Australian Aboriginal legends.

6 Theorem-like Environments

The following theorem-like environments (in alphabetical order) are available in this style.

Acknowledgement 1 *This is an acknowledgement*

Algorithm 2 *This is an algorithm*

Axiom 3 *This is an axiom*

Case 4 *This is a case*

Claim 5 *This is a claim*

Conclusion 6 *This is a conclusion*

Condition 7 *This is a condition*

Conjecture 8 *This is a conjecture*

Corollary 9 *This is a corollary*

Criterion 10 *This is a criterion*

Definition 11 *This is a definition*

Example 12 *This is an example*

Exercise 13 *This is an exercise*

Lemma 14 *This is a lemma*

Proof. This is the proof of the lemma. ■

Notation 15 *This is notation*

Problem 16 *This is a problem*

Proposition 17 *This is a proposition*

Remark 18 *This is a remark*

Solution 19 *This is a solution*

Summary 20 *This is a summary*

Theorem 21 *This is a theorem*

Proof of the Main Theorem. This is the proof. ■

A The First Appendix

The appendix fragment is used only once. Subsequent appendices can be created using the Section Section/Body Tag.