

## THE FULL TITLE OF YOUR PAPER: SAMPLE $\text{\LaTeX}$ FILE FOR AIMS JOURNALS

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ABSTRACT. This fictitious paper is meant to serve only as the template for AIMS' journals: DCDS-A, DCDS-B, CPAA, JIMO, NHM, JMD, AMC, IPI and ERA-MS. Please read the instructions in the tex file very carefully. The sample file for MBE may be downloaded at <http://www.mbejournal.org/>.

### 1. INTRODUCTION

With the setting of the template, automatically the text is set in 10 point fonts, while the abstract and references are in 8 point fonts. All formulas and pictures must be within the limit of **5 inches** in width. An abstract is needed and not exceeding **200** words. Also needed are some **key words** and **AMS subject classifications**. Here are some important instructions on how to prepare your final  $\text{\TeX}$  files. Please pay special attention to the following:

1. To produce a theorem, lemma, proposition, corollary, conjecture, etc., you need to use the standard command  $\backslash\text{begin}\{\dots\}$  to start with, and  $\backslash\text{end}\{\dots\}$  to finish. All texts in such environment should be automatically *slanted*.
2. For a definition, remark, or notation, please use the standard commands  $\backslash\text{begin}\{\dots\}$  and  $\backslash\text{end}\{\dots\}$ . However all texts in such a environment should be automatically **normal**.
3. For all **proofs**, please use  $\backslash\text{begin}\{\text{proof}\}$  and  $\backslash\text{end}\{\text{proof}\}$  commands. Do not define your own macros.
4. Make sure all **lines**, **math formulas** and **figures** are **within the limit of 5 inches in width**. In particular, formulas can not run to the right of equation numbers. Never run out of the bound.
5. The following seven items all address the exact **reference style**. Please also follow very closely the reference samples at the end of this article.
  - i) List papers in alphabetic order according to first authors.
  - ii) Always place the first name (or first name initial) first, then the middle name initial (optional), followed by the last name. If there are multiple authors, use the word 'and' to connect the last two authors. See references [1], [2] and [3] for details.

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2000 *Mathematics Subject Classification*: Primary: 58F15, 58F17; Secondary: 53C35.  
*Key words and phrases*: Dimension theory, Poincaré recurrences, multifractal analysis.  
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- iii) If a reference is a paper in a journal, the title of the paper should be *slanted*, which can be achieved by putting the title inside the braces: `\emph{...}`. Only the first character in a paper's title is in capital. When you list a paper from a journal, please ignore the issue number since the page numbers and volume number yield sufficient information to identify the paper. Finally, please pay attention to the correct way for **volume number** (in bold face), **year**, **starting page–ending page**. See references [2] and [3] for details.
- iv) If the reference is a book, one should quote the title of the book, the first letter of each word should be capitalized. See reference [4] for details.
- v) If the reference is a paper in a conference proceeding, please see the sample reference [5].
- vi) If the reference is a thesis, please see the sample reference [6].
- vii) Please don't list any references you never cited in your paper.

Please use the AIMS template to prepare your tex file after the paper is accepted by an AIMS journal. Thank you for your cooperation.

1.1. EXAMPLE OF DEFINITION AND THEOREM. Definition sample:

**Definition 1.1.** Sample: Let  $\phi_t$  be an Anosmia flow on a compact space  $V$  and  $A \subset V$  a dense set. Say that the upper Lacunae exponents are  $\frac{1}{2}$ -pinched on  $A$  if

$$(1) \quad \sup_{x \in A} \frac{\max\{|\bar{\lambda}| : \bar{\lambda} \text{ is a nonzero upper Lyapunov exponent at } x\}}{\min\{|\lambda| : \lambda \text{ is a nonzero upper Lyapunov exponent at } x\}} \leq 2.$$

A. B asked in [2] how to state a theorem in AIMS journal, here is an example:

**Theorem 1.2.** *Content of your theorem.*

*Proof.* Your proof statements. □

Now let's move to the next subsection.

1.2. A SAMPLE LEMMA.

**Lemma 1.3.** *State your lemma here.*

*Proof.* Your proof statements. □

Now let's move to the next section.

## 2. THE TITLE OF YOUR SECTION 2

PostScript graphics in EPS (Encapsulated PostScript) format can be included and should be sent as separate files. The preferred macro package for including EPS graphics files is the LaTeX graphicx package. Further, please follow the below **instructions on figures**:

1. Notice that all color graphics will be printed in black and white in the AIMS journals, **make sure that a black and white printout of your figure is legible**.
2. All figures should be placed in the body of your paper and before your Reference.
3. In a page with figures, there should be no unnecessary spare space. Be sure that a page should be fully occupied by figures and texts.

4. Reduce the physical size of your figures if possible, while keep your figures **clearly visible**. For example, an eps figure file with size bigger than 1MB is usually unacceptable.
5. Again, be sure that all **figures** are **within the limit of 5 inches in width**. Never run out of the bound.

See an example below.



FIGURE 1. Here is the Caption of your figure

**Theorem 2.1.** *Content of your second theorem.*

In both definition and remark, the text should not be slanted.

**Remark 1.** Content of your remarks.

In the proof below, we would like to show how to align the math formulas:

*Proof of Theorem 2.1.* Please align you math formulas:

$$\begin{aligned}
 \theta_\varepsilon \wedge d\theta_\varepsilon^{n-1} &= (\theta_0 + \varepsilon\alpha) \wedge (d(\theta_0 + \varepsilon\alpha))^{n-1} \quad \text{since } d\alpha = 0 \\
 &= (\theta_0 + \varepsilon\alpha) \wedge (d\theta_0)^{n-1} + \theta_0 \wedge d\theta_0^{n-1} - \varepsilon d(\alpha \wedge \theta_0 \wedge d\theta_0^{n-2}) \\
 &\quad + \theta_0 \wedge d\theta_0^{n-1} + \varepsilon\alpha \wedge d\theta_0^{n-1} \\
 &= \theta_0 \wedge d\theta_0^{n-1} - \varepsilon d(\alpha \wedge \theta_0 \wedge d\theta_0^{n-2}),
 \end{aligned}
 \tag{2}$$

So,

$$\begin{aligned}
 \int_0^T |u_0(t)|^2 dt &\leq \delta^{-1} \left[ \int_0^T (\beta(t) + \gamma(t)) dt \right. \\
 &\quad \left. + T^{\frac{2(p-1)}{p}} \left( \int_0^T |\dot{u}_0(t)|^p dt \right)^{\frac{2}{p}} + T^{\frac{2(p-1)}{p}} \left( \int_0^T |\dot{u}_0(t)|^p dt \right)^{\frac{2}{p}} \right].
 \end{aligned}
 \tag{3}$$

Please use the displaystyle if your formulas fully occupy a paragraph, while use textstyle among the text.

For two equations:

$$\begin{aligned}
 A &= \theta_0 \wedge d\theta_0^{n-1} - \varepsilon d(\alpha \wedge \theta_0 \wedge d\theta_0^{n-2}) \\
 B &= \theta_1 \wedge d\theta_1^{n-1} - \varepsilon d(\alpha \wedge \theta_1 \wedge d\theta_1^{n-2})
 \end{aligned}$$

Please align your formulas nicely. Thanks.

□

## ACKNOWLEDGEMENTS

We would like to thank the referees very much for their valuable comments and suggestions.

## REFERENCES

- [1] FirstName MiddleInitial. LastName, *Title of the paper*, Name of the journal, **Volume** (Year), StartingPage–EndingPage.
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- [4] R. Bott, “Differential Forms in Algebraic Topology,” Springer-Verlag, New York, 1986.
- [5] J. Serrin, *Gradient estimates for solutions of nonlinear elliptic and parabolic equations*, in “Contributions to Nonlinear Functional Analysis” (eds. E.H. Zarantonello and Author 2), Academic Press, (1971), 33–75.
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