

INSTRUCTIONS FOR AUTHORS

THOMAS LAMPERT¹, MARIJA STANIĆ², AND TATJANA ALEKSIĆ²

ABSTRACT. This file contains a user's guide for the preparation of articles accepted for printing in the *Kragujevac Journal of Mathematics*, using the `kjmath.cls` class. The corresponding `kjm_template.tex` file can be used as a template for any submissions.

1. INTRODUCTION

For initialising the class and formatting the article header the file `kjm_template.tex` can be used as a template file. Author addresses (institute or company affiliation, etc.) should appear at the end of the paper.

Text should be typed as usual. Emphasized text is obtained by using the commands `\em` and `\it`. This will result in italic text representing emphasis. Italic text made using these commands should be terminated by an italic correction `\/`, e.g. `{\em italic text\/}` unless the text in italics is immediately followed by a full stop (.) or comma (,). Note that this is not needed when using the `\textit` command as latex automatically adjusts its spacing. For abbreviations that end in a period—i.e. e.g. and etc.—use `i.e.\`, `e.g.\` or `etc.\` respectively (unless they are immediately followed by other punctuation marks). For further reading on the topic of proper latex usage please refer to The TeXBook by Donald Knuth [4].

Lists of items are produced with the usual `itemize` and `enumerate` environments.

2. SECTIONAL UNITS

Sectional units are obtained in the usual way, i.e. with the L^AT_EX commands `\section`, `\subsection`, `\subsubsection`, `\paragraph` and `\subparagraph`.

3. CROSS-REFERENCES

Please always give a `\label` where possible (e.g. for equations, figures, tables, sections, subsections, all theorem-like environments etc.) and use `\ref` for cross-referencing. Also, the `\bibitem` and `\cite` mechanism for bibliographic references is obligatory (see Section 7).

Key words and phrases. Example, Latex, KJMath.

2020 *Mathematics Subject Classification.* Primary: XXXXX. Secondary: YYYYY, ZZZZZ.

DOI

Received:

Accepted:

4. MATHEMATICAL FORMULAS

For in-line formulas use `$... $`. For unnumbered displayed one-line formulas use the `equation*` environment. For numbered displayed one-line formulas use the `equation` environment. For example:

For $i^2 = -1$ the following equality holds:

$$(4.1) \quad e^{ix} = \cos x + i \sin x.$$

Using equation (4.1) we obtain

$$e^{i\pi} = \cos \pi + i \sin \pi = -1.$$

For displayed multi-line formulas use the `align` (for numbered formulas) or `align*` (for unnumbered formulas) environments. For example:

$$\begin{aligned} \int_E p_m(x) w_m(x) dx &= \int_E [q(x)s_m(x) + r(x)] w_m(x) dx \\ &= \int_E q(x)s_m(x) w_m(x) dx + \int_E r(x) w_m(x) dx, \end{aligned}$$

or

$$(4.2) \quad \alpha_{n,0} = \frac{\left(x\pi_n, \pi_{[(n-2)/2]}\right)_{\nu+1}}{\left(\pi_{n-2}, \pi_{[(n-2)/2]}\right)_{\nu+1}},$$

$$\alpha_{n,1} = \frac{\left(x\pi_n - \alpha_{n,0}\pi_{n-2}, \pi_{[(n-1)/2]}\right)_{\nu}}{\left(\pi_{n-1}, \pi_{[(n-1)/2]}\right)_{\nu}},$$

$$(4.3) \quad \alpha_{n,2} = \frac{\left(x\pi_n - \alpha_{n,0}\pi_{n-2} - \alpha_{n,1}\pi_{n-1}, \pi_{[n/2]}\right)_{\nu-1}}{\left(\pi_n, \pi_{[n/2]}\right)_{\nu-1}}.$$

For text in mathematical formulas use the `\text{trm}` command and please punctuate your equations (end with a period or comma, as in Eq. (4.2) and Eq. (4.3) above).

To produce the symbols \mathbb{N} , \mathbb{Z} , \mathbb{Q} , \mathbb{R} , \mathbb{C} , \mathbb{P} , and \mathbb{T} use `\mathbb{N}`, `\mathbb{Z}`, `\mathbb{Q}`, `\mathbb{R}`, `\mathbb{C}`, `\mathbb{P}`, and `\mathbb{T}`, respectively.

For binomial expressions such as $\binom{n}{k}$ use `\binom{n}{k}`.

Several common operators and log-like functions are defined: `\Span`, `\diag`, `\det`, `\sgn`, `\Si`, `\log`, `\int`, `\supp`, `\Co`, `\Pc`, `\Re`, `\Im`, and `\res` produce Span , diag , det , sgn , Si , \log , \int , supp , Co , Pc , \Re , \Im , and Res , respectively. New operators can be defined using `\DeclareMathOperator{\sgn}{sgn}`.

5. THEOREM-LIKE ENVIRONMENTS

Table 1 lists the environments that are defined. For example, create a theorem and its proof using

```
\begin{theorem} An example theorem. \end{theorem}
```

TABLE 1. Environments defined in the `KJMath` class

Environment name	Heading	Environment name	Heading
<code>theorem</code>	Theorem	<code>lemma</code>	Lemma
<code>corollary</code>	Corollary	<code>proposition</code>	Proposition
<code>definition</code>	Definition	<code>remark</code>	Remark
<code>example</code>	Example	<code>proof</code>	Proof

TABLE 2. Nodes x_ν , $\nu = 0, 1, \dots, 6$

ν	x_ν
0	-3.141592653589793
1	-2.142289082021412
2	-1.166433858435203
3	-0.260517323294647
4	0.575836178683751
5	1.408529709542752
6	2.242866498580637

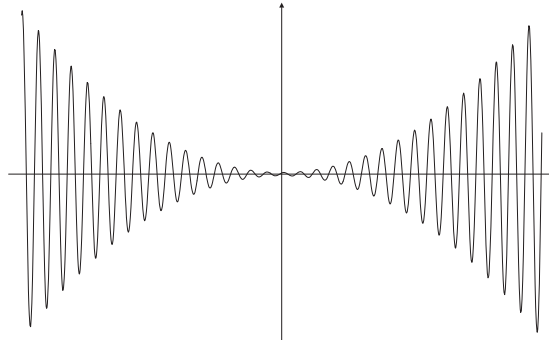
`\begin{proof}` An example proof. `\end{proof}`
 which produces

Theorem 5.1. *An example theorem.*

Proof. An example proof. □

6. TABLES AND FIGURES

Put tables and figures in the text using the `table` and `figure` environments, and position them near their first reference. For example see Figure 1 and Table 2.

FIGURE 1. Function $f(x) = (x^2 + 1)(\cos 10x + \sin 10x)$, $x \in (-10, 10)$

7. REFERENCES

References should be listed alphabetically at the end of the manuscript, in the same way as in this example (for a book [4], a paper in a journal [2], a paper in a contributed volume or conference proceedings [7], and an unpublished paper [3]).

Journal names should be abbreviated according to the AMS standards: <http://www.ams.org/msnhtml/serials.pdf>.

Unpublished citations will not be accepted and will be removed or replaced during the article's preparation by the editorial team.

8. OVERFULL LINES

The template includes the `\overfullrule` command, which will add a black block to the end of any lines that extend past the text margin. Please watch out for these and correct them before submitting.

Acknowledgements. Acknowledge funding agencies, or people who have helped (if appropriate).

9. REFERENCES

References need to be in KJM style.

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference.

The journal names should be abbreviated to the standards used by the journal: <https://mathscinet.ams.org/msnhtml/serials.pdf>

Examples of references are given bellow.

REFERENCES

- [1] M. Arsenovic and R. F. Shamoyan, *On zero sets and parametric representations of some new analytic and meromorphic function spaces in the unit disk*, Filomat **25**(3) (2011), 1–14. <https://doi.org/10.2298/FIL1103001A>
- [2] K. Singh and K. Modi, *Convergence of double cosine series*, Kragujevac J. Math. **44**(3) (2020), 443–458. <https://doi.org/10.46793/KgJMat2003.443S>
- [3] M. Smith, *Polynomial root classification*, Kragujevac J. Math. (2015), (to appear).
- [4] D. E. Knuth, *The TeXbook*, Addison-Wesley Professional, Indiana, 1986.
- [5] H. Hedenmalm, B. Korenblum and K. Zhu, *Theory of Bergman Spaces*, Springer-Verlag, New York, 2000.
- [6] I. Gutman, *The energy of a graph: old and new results*, in: A. Betten, A. Kohnert, R. Laue and A. Wassermann (Eds.), *Algebraic Combinatorics and Applications*, Springer-Verlag, Berlin, 2001, 196–211.
- [7] P. Erdős, *On the distribution of the roots of orthogonal polynomials*, in: G. Alexits and S. B. Steckhin (Eds.), *Proceedings of a Conference on Constructive Theory of Functions*, Akadémiai Kiadó, Budapest, 1972, 145–150.

¹ICUBE,
UNIVERSITY OF STRASBOURG
E-mail address: `tomalampert@hotmail.com`

²DEPARTMENT OF MATHEMATICS,
FACULTY OF SCIENCE,
UNIVERSITY OF KRAGUJEVAC
E-mail address: `taleksic@kg.ac.rs`
E-mail address: `stanicm@kg.ac.rs`