Ten years of work in Wiadomości Matematyczne

an adventure with LaTeX and Emacs hacking

Marcin Borkowski

Adam Mickiewicz University

2017-05-03
Important notice: the actual presentation in Bachotek was given using Emacs, with a live demo. These slides, while more or less equivalent to what was shown during that presentation, do not capture most of its contents. Also, the slides only give hints as to what is covered when and are not very useful without attending the talk. Rumor has it that a video of the presentation might be available some day.
Contents

* Introduction

* Assumptions and policies

* \TeX\ classes

* Emacs side

* Plans
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* Assumptions and policies

* \LaTeX\ classes

* Emacs side

* Plans
Introduction

- What is Wiadomości Matematyczne?
- What do we do there?
  + typesetting
  + proofreading
  + printing
  + sending out
- What tools do we use?
* Introduction

* Assumptions and policies

* \LaTeXe{} classes

* Emacs side

* Plans
Assumptions and policies

- low volume - we can afford much manual work
- one output format only - pdf
- keeping things in order
- class design goals
  + individual and wholesale typesetting
  + metadata
  + grid
  + reasonable automation
* Introduction

* Assumptions and policies

* \LaTeX \ classes

* Emacs side

* Plans
Documenting classes

- docstrip
- gmdoc vs. ltxdoc
One or more?

- too many classes spoil the source
Packages

1. xparse
2. etoolbox
3. amsmath
4. mathtools
5. pgfkeys
6. pgfplots
7. amsrefs
8. MinionPro
9. polski
10. geometry
11. ifpdf
12. graphicx
13. tikz
14. multicol
15. fancyhdr
16. booktabs
17. adforn
18. microtype
19. upref
20. nicefrac
21. url
22. pdfpages
23. hyperref
Docstrip guards

- only two of them
- most code is shared anyway
Class options

- pgfopts
Macros for the whole issue

- hooks \AtBeginArticle / \AtEndArticle
- \ArticleOnly / \IssueOnly
- \Year, \Volume, ...
- labels etc.
- \wmdocumentclass etc.
- \DeclareMathOperator
- article groups
- table of contents
Metadata

- \DefineDataGrabber
- title (and variants!), author(s) (with cities!), ...
- \makeauthorlist, \firstauthor, \nextauthor
Design

- font
- oldstyle numerals
- skips and grid
- page layout
- article header
- titlepage, author and title footnotes
- image wrapping, \fakepar
- author info at the end
- (sub)sections
- running headers
- theorems
- enumerations
- bibliographies
- figures and tables
- miscellanea
Generating pdfs

- generatefiles
- hyperref and page numbers
- generating xml
* Introduction

* Assumptions and policies

* \LaTeX \ classes

* Emacs side

* Plans
hacks

- smart ties
- smart commas
- smart dashes
mrr-auto-replace

- automatic replacing of math delimiters
- inserting ties
- Polish diacritical signs
mrr-replace-mode

- interactive
- cycling through alternatives
- matching using regexen and arbitrary (predicate) functions
- ‘‘magical’’ conversion of hand-crafted bibliographies
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* \LaTeX\ classes

* Emacs side

* Plans
Plans

- templates for new articles (yasnippet)
- automating the workflow