#+TITLE: Ten years of work in Wiadomości Matematyczne
#+SUBTITLE: an adventure with LaTeX and Emacs hacking

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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.

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* Assumptions and policies

* LaTeX classes

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Introduction

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

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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

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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. pgfopts
7. amsrefs
8. MinionPro
9. polski
10. geometry
11. ifpdf
12. graphicx
12. tikz
13. multicol
14. fancyhdr
15. enumitem
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

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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

amsrefs-convert-bib

- ‘‘magical’’ conversion of hand-crafted bibliographies

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Plans

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