**ArsTeXnica**

Contents of issues 2–3 (2006–2007)

Editor’s note: *ArsTeXnica* is the journal of Q\textita; the Italian TeX user group. The journal’s web site is [http://www.guit.sssup.it/arstexnica](http://www.guit.sssup.it/arstexnica).

**ArsTeXnica #2, October 2006**

Massimiliano Dominici and Maurizio W. Himmelmann, Editoriale [From the editor]; pp. 3–4

A short note about the third meeting of the Italian \TeX\ user Group (Q\textita;).

Enrico Gregorio, Codici di categoria [Category codes]; pp. 5–14

\TeX\ works with token lists formed when it reads characters from a .\textit{tex} document. Understanding the \textit{tokenization} procedure is important if one wants to modify the usual behavior of \TeX. In this respect the notion of \textit{category code} attached to a character is fundamental.

Chiefly interesting are the \textit{active characters}. I will give an application of them, which exploits some of the new features of \textit{\v{e}}\TeX\.[Translation by the author]

Gustavo Cevolani, Libretti in \textit{\v{e}}\TeX\ [Booklets in \textit{\v{e}}\TeX\]; pp. 15–30

The first part of the article shows the main methods \textit{\v{e}}\TeX\ has to print brochures, booklets and real books. The second part presents some code examples and the related results, in addition to considering some alternative methods.[Translation by G. Pignalberi]

Lapo Mori, Tabelle su \textit{\v{e}}\TeX\ 2\textit{\v{e}}\: pacchetti e metodi da utilizzare [Tables in \textit{\v{e}}\TeX\ 2\textit{\v{e}}: packages and methods to be used]; pp. 31–47

This article aims at providing the background to create and correctly format tables using \textit{\v{e}}\TeX\ 2\textit{\v{e}}. I’ll aim for this objective by analyzing the usual problems dealt with while creating tables and the proposed solutions; I will mainly focus on which package is better to use in a given circumstance. I will present examples for every case and, when necessary, I will redirect you to the package’s manuals.[Translation by G. Pignalberi]

Kaveh Bazargan and CV Radhakrishnan, Removing vertical stretch — mimicking traditional typesetting with \TeX\; pp. 48–53

(Published in *TUGboat* 28:1.)

Jean-Michel Hufflen, ml\textsc{Bib}\textsc{TeX}\’s architecture; pp. 54–59

This paper describes the architecture of ml\textsc{Bib}\textsc{TeX}, our reimplementation of \textsc{Bib}\textsc{TeX}\ focusing on multilingual features. Making precise the organisation and modules of this architecture allows us to show how ml\textsc{Bib}\textsc{TeX}\ works and focus on the differences between ml\textsc{Bib}\textsc{TeX}\ and \textsc{Bib}\textsc{TeX}\ from a conceptual point of view. We also explain why this implementation using the Scheme programming language allows users to scrutinise the result of intermediate steps.

Onofrio de Bari, GNU Emacs e AUCTEX per \textit{\v{e}}\TeX\ [GNU Emacs and AUCTEX for \textit{\v{e}}\TeX\]; pp. 60–64

This article aims at collecting information and tools useful to use the GNU Emacs editor along with the AUCTEX extension to edit \textit{\v{e}}\TeX\ documents, presenting instructions and advice never translated into Italian, although available in other languages.

First I introduce the GNU Emacs editor, its logic structure and the instructions to give it to make it easy to use with \textit{\v{e}}\TeX\ and \textit{\v{e}}\TeX\; then I will do a detailed analysis of the AUCTEX and the \textit{preview-latex} software modules, useful when editing source code and previewing the document.[Translation by G. Pignalberi]

Salvatore Palma, Test interattivi di matematica e fisica on-line: il \textit{\v{e}}\TeX\ come strumento di sviluppo [On-line mathematics and physics interactive tests: \textit{\v{e}}\TeX\ as development tool]; pp. 65–70

During the school year 2005/06, on my school site, I started building a project aimed at giving my students mathematics and physics supplementary lessons and material. In my works I mainly use University of Akron’s Prof. D.P. Story’s Acro\TeX\ and Prof. C.V. Radhakrishnan’s pdfscreen.[Translation by G. Pignalberi]

Jerónimo Leal, Esperienze didattiche con \textit{\v{e}}\TeX\: un corso di edizioni critique [Didactic experiences with \textit{\v{e}}\TeX\: a critical editions course]; pp. 71–74

This article gives some personal experiences on the organization of a \textit{\v{e}}\TeX\ course aimed at printing critical editions, in two parts. First, the preparation: choosing the distribution, choosing the editor, preparing the lessons, the examples and the exercises, advertising and subscribing; then, the real course: sending the lessons, installing the package, verifying the understanding and analyzing the results; finally, the production: sending the lessons, installing it, learning test and results analysis.[Translation by G. Pignalberi]
Massimiliano Dominici and Pier Daniele Napolitani, Edizione con \texttt{\LaTeX} delle opere di Francesco Maurolico [A \texttt{\LaTeX} edition of the works of Francesco Maurolico]; pp. 75–82

The Maurolico Project was started some years ago to publish, both in print and as electronic documents, the critical edition of Francesco Maurolico’s (1494–1575) work. Within the project, a system called \texttt{mauro-\LaTeX} was built; it is obtain able HTML output, intended for the publication on the Internet, and standard \texttt{\LaTeX} output, intended as an intermediate format to PDF and PostScript, starting from a \texttt{\LaTeX}-like mark-up language.

\texttt{mauro-\LaTeX} is undergoing a complete revision. We are moving the section related to text coding to XML; in addition, as soon as we started printing the work, we got feedback that helped us thoroughly revise the macros \texttt{\LaTeX} uses to generate the PDF and PostScript output.

Roberta Tucci, L’edizione critica di un’opera matematica: \texttt{mauro-\LaTeX} e \texttt{METAPOST} [Mathematical works’ critical editions: \texttt{mauro-\LaTeX} and \texttt{METAPOST}]; pp. 83–87

This article is in three parts: the first collects some philological problems that usually arise when starting a mathematical work’s critical edition; the second part describes the \texttt{mauro-\LaTeX} and \texttt{METAPOST} tools chosen to edit the critical edition; the third and last part briefly shows the result obtained using the mentioned tools.

[Translation by G. Pignalberi]

\textit{Ars\TeXnica} #3, April 2007

Massimiliano Dominici, Editoriale [From the editor]; p. 3

A short overview of the present issue.

Frank Mittelbach, Gianluca Pignalberi and David Walden, Intervista a Frank Mittelbach [Interview with Frank Mittelbach]; pp. 4–12

Both the Free Software Magazine (FSM, \url{http://www.freesoftwaremagazine.com}) and the \TeX Users Group (TUG, \url{http://www.tug.org/}) both like to publish interviews. Recently, Gianluca Pignalberi of FSM and Dave Walden of TUG both approached Frank Mittelbach about interviewing him. Rather than doing two separate interviews, Mittelbach, Pignalberi, and Walden decided on a combined interview in keeping with the mutual interests already shared by FSM and TUG.

Claudio Beccari, \texttt{\LaTeX} e la cesura delle parole in fin di riga [\texttt{\LaTeX} and word hyphenation at line breaks]; pp. 13–20

This tutorial explains how \texttt{\LaTeX} (the program) typesets paragraphs, possibly by hyphenating words at line breaks.

Specifically, this tutorial should explain \texttt{\LaTeX}’s (actually \texttt{\LaTeX}’s) strange behavior in certain circumstances when it apparently refuses to correctly break lines. If there is some error, unfortunately this is always a human one, and it is due to an insufficient understanding of \texttt{\LaTeX}’s procedures and algorithms.

Lapo Filippo Mori, \texttt{\LaTeX}pedia: il futuro della documentazione su \texttt{\LaTeX} [\texttt{\LaTeX}pedia: the future of \texttt{\LaTeX} documentation]; pp. 21–26

(Published in The \texttt{Prac\TeX} Journal 2007-1.)

Lapo Filippo Mori, Scrivere la tesi di laurea con \texttt{\LaTeX} 2\alpha [Writing a thesis with \texttt{\LaTeX} 2\alpha]; pp. 27–45

The goal of this article is to provide the tools to write a thesis with \texttt{\LaTeX} 2\alpha. The article analyzes the problems that are usually encountered while writing a thesis and their solution; a particular emphasis is on the packages to use in each case. The topics are not examined in depth and, when necessary, the reader is referred to specific literature or to the manual of the suggested packages.

Salvatore Schirone, La tipografia nel taschino. Presentazione del sistema \texttt{\PST 4\GR} [Typography in the pocket: Overview of \texttt{\PST 4\GR}]; pp. 46–51

\texttt{\PST 4\GR} is an open source portable USB \texttt{\LaTeX} system for Windows (9x, ME, XP), freely available on the Internet. \texttt{\PST 4\GR} provides a fully working \texttt{\LaTeX} system always at hand, so that one can compile one’s own .\texttt{tex} source files on any computer. In the present article I will introduce \texttt{\PST 4\GR} for the first time, and I will describe its structure and how to install and customize it.

[Translations by the authors.]

\textit{Les Cahiers GUTenberg}

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Editor’s note: \textit{Les Cahiers GUTenberg} is the journal of GUT, the French \TeX user group. Their website is \url{http://www.gutenberg.eu.org}.

Issue 46–47 reprints a number of articles from the Euro\TeX 2003 (Brest) conference. This proceedings was published as \textit{TUGboat} 24:3, and is available online at \url{http://tug.org/TUGboat/Articles/tb24-3}. 

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