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Editor's note: ArsTeXnica is the journal of GIT, the Italian TeX user group (http://www.guit.sssup.it/).

ArsTeXnica #5, April 2008

GIANLUCA PIGNALBERI, Editoriale [From the editor]; p. 3

A short overview of the present issue.

Massimo Guiggiani and Lapo F. Mori, Consigli su come non maltrattare le formule matematiche [How to avoid abusing mathematical formulae]; pp. 5–14

[Published in TUGboat 29:2.]

MASSIMILIANO DOMINICI, Introduzione a XATEX [Introduction to XATEX]; pp. 15–26

Unicode and smart font technologies are the current de facto standard in digital typography. This article should explain how they can be incorporated, with XATEX, in a TEX-based typesetting system.

CLAUDIO BECCARI, Macroistruzioni con argomenti delimitati [Macros with delimited arguments]; pp. 27–34

The macro package commonly known as LATEX does not describe any means for defining macros with delimited arguments; furthermore it offers a very small number of them to the user. By means of the primitive commands of the TEX interpreter it is easy to define macros with delimited arguments that may be used also while using the other LATEX macros. This kind of macros may be very useful in some instances, particularly when writing class or package files, where they make it easy to identify the function that any argument plays in the macro expansion. The subject is described with the aid of a practical problem: the Lecture Log.

ENRICO GREGORIO, HyPlain, più lingue insieme anche in Plain [HyPlain, several languages together under Plain]; pp. 35–42

We describe a system for enabling hyphenation in several languages under Plain TeX, along with an interface to define the used languages and their conventions.

ArsTeXnica #6, October 2008

GIANLUCA PIGNALBERI and MASSIMILIANO DOMINICI, Editoriale [From the editor]; pp. 3–4

A short note about the fifth meeting of the Italian TEX user group (QIT).

KLAUS HÖPPNER, A short introduction to MetaPost; pp. 5–9

MetaPost is strongly related to Knuth's original Metafont. It uses nearly the same graphics language and syntax, but instead of bitmap fonts it produces PostScript output. So it can be used to create high quality graphics. In MetaPost, points and paths may be described by a set of linear equations that are solved by the program. Thus, MetaPost becomes unique among other tools like PSTricks or commercial applications (e.g., CorelDraw).

Additionally, the PostScript subset created by MetaPost can be interpreted by pdfTeX. So MetaPost figures can be directly included with e.g., the standard LaTeX graphics package, while normal EPS images have to be converted first to be usable with pdfLaTeX.

AGOSTINO DE MARCO, Gestione avanzata delle figure in LATEX: l'annotazione di illustrazioni e grafici con psfrag/PSTricks e PGF/TikZ [Advanced graphics handling under LATEX: annotation of figures and graphs with psfrag/PSTricks and PGF/TikZ]; pp. 10–27

This article shows how the combination of LATEX with the package PSTricks or with PGF/TikZ can be used to produce advanced, nice-looking illustrations and plots. This subject is dealt with at a technical level biased towards intermediate/advanced users. The aim of the work is presenting a number of examples of how a figure, that is a bitmapped or vector image, might be annotated according to the typographic style of the main LATEX document and of the displayed math.

ROBERTO GIACOMELLI, Una tabella che fa calcoli [A computing table]; pp. 28–36

One of main advantages of LATEX is an easy markup syntax of the text. The user is able to build up the informative content of the document without worrying about how it will appear on the page.

This paper aims at testing this remarkable characteristic of LATEX, both for the author's productivity and the quality of his work, building, with particular attention to the syntax project, a new environment of type table for invoices, expense notes and liquidation.

The linguistic aspects will be first discussed, taking into account a testing carried out on a group of users working in the business sector. Then the complete code of the new environment called calctab, will be proposed, starting with the list of the powerful LATEX packages it is based upon, and the numeric TEX capability.

In the end some hints about methods will be

given in order to spread L^ATEX more widely in business and professional offices.

LAPO F. MORI, Gestire la bibliografia con LATEX [Managing bibliographies with LATEX]; pp. 37–51 [Published in this issue of TUGboat.]

LORENZO PANTIERI, Introduzione allo stile ClassicThesis [Introduction to the ClassicThesis style]; pp. 52–66

The purpose of this work is to provide the Italian LATEX users some tools to write documents using the ClassicThesis style, by André Miede, inspired by Robert Bringhurst's masterpiece The Elements of Typographic Style (1992).

This aim is pursued by introducing my personal reworking of the style documentation (Miede, 2007) and analyzing the typical problems faced during the writing of an academic or professional publication, especially in the Italian language, while showing the solutions I think better.

NORBERT PREINING, TEX Live 2008 and the TEX Live Manager; pp. 67–75

[See abstract in Die TeXnische Komödie 2009/2.]

GIANLUCA PIGNALBERI and ENRICO BINI, LATEX e grammatiche (la faccia triste dell'informatica) [LATEX and grammars]; pp. 76–85

Grammars, syntax diagrams and automata are computer science's basic topics; thanks to them our computers can do what they do. LATEX has to be able to typeset them. In this paper we'll give an overview of which tools we can use to add those elements to our documents.

AGOSTINO DE MARCO and MASSIMILIANO DOMINICI, longmedal: un pacchetto per medaglioni divisi su più pagine [longmedal: a package for floating framed boxes spanning several pages]; pp. 86–92

Some textbooks organize different kinds of advanced or secondary material in framed boxes, possibly spanning several pages. The longmedal package aims at providing an easy interface to reproduce such objects in a LATEX document.

JEAN-MICHEL HUFFLEN, Specifying translated works in bibliographies; pp. 93–97

First we recall the layout recommended within a bibliography for a translation of a document. Then we explain why entries for translated works cannot be specified nicely if we use BibTeX. A solution is proposed for future implementation in MlBibTeX.

ArsTeXnica #7, April 2009

GIANLUCA PIGNALBERI, Editoriale [From the editor]; p. 3

Overview of this issue.

GIANLUCA PIGNALBERI and MASSIMILIANO DOMINICI, Intervista eSamizdat Simone Guagnelli [Interview with eSamizdat founder Simone Guagnelli]; pp. 4–7

Usually TEX is linked to the typesetting of scientific texts, where a considerable use of formulae, and mathematical notation in general, is required. Yet it may prove a useful tool also in different kinds of publications, as shown in this interview with Simone Guagnelli, editor and founder, together with Alessandro Catalano, of eSamizdat.

GIOVANNI MASCHIO, TEX per i ciechi e per gli ipovedenti [TEX for blind and vision-impaired people]; pp. 8–12

We present here a number of reasons to choose an existing way to code mathematics, suitable for blind people, avoiding creating new methods.

CLAUDIO BECCARI, Il formato archiviabile dei file PDF [The archive format for PDF files]; pp. 13–24

Archiving electronic documents requires a special format called PDF/A-1 by the ISO regulation 19005-1. This paper shows how to obtain this result with the main and subsidiary programs of the TEX system. Some difficulties that are encountered in this process will be also highlighted; some solutions to the above problems will be suggested.

CLAUDIO BECCARI, GEORGE KAMEL, Typesetting Coptic liturgy in Bohairic; pp. 25–31

This paper describes what the authors have done in order to typeset some Coptic texts with LATEX, mainly in the Bohairic variant used in liturgy. This implied the creation of suitable fonts, the macros for typesetting special liturgical symbols, the hyphenation patterns necessary to typeset with the Coptic alphabet and the rules used by the Bohairic variant.

RICCARDO NISI, Il PostScript in LATEX [PostScript in LATEX]; p. 32

PSTricks, along with its links to PostScript, gave me the chance to take an interest in this language, searching for further occasions to integrate it with LATEX, and enrich its application scope.

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