

***ArsTeXnica* #11–12 (2011)**

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***ArsTeXnica* #11 (April 2011)**

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

ANTONELLO PILU, La creazione di una prova d'esame [How to create an exam test]; pp. 5–14

This article will show how to realise, in a fast and simple way, a test with L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>, using its exam package. With this package we will be able to elaborate many different tests, from the easiest to the more complex ones, always keeping the high graphical quality of L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>.

GIANLUCA PIGNALBERI, SALVATORE SCHIRONE, JERÓNIMO LEAL, Introduzione agli strumenti per grecisti classici [Introduction to tools for hellenists]; pp. 15–30

Hellenists' work is as hard, or even harder, than that of any other literary scholars. Thus, they need powerful and versatile tools. This paper shows two editors, two typesetters and some useful techniques for this job. The authors of this paper effectively use all of them.

MARCO CRIVELLARO, Un dialogo tra GNU R e L<sup>A</sup>T<sub>E</sub>X: `xtable` e Sweave [Dialogue between GNU R and L<sup>A</sup>T<sub>E</sub>X: `xtable` and Sweave]; pp. 31–36

The aim of this article is to show the ways by which R, software for statistical computation, can be combined with L<sup>A</sup>T<sub>E</sub>X for the writing of high quality statistical reports. This article is from my experience during the writing of my thesis in marketing at University Ca' Foscari in Venice.

GIOVANNI MASCELLANI, Uno strumento per gestire progetti L<sup>A</sup>T<sub>E</sub>X cooperativi [A tool to manage cooperative L<sup>A</sup>T<sub>E</sub>X projects]; pp. 37–40

Using and modifying available free and open source tools, we made a portal that students can use to collaborate in writing notes and text with L<sup>A</sup>T<sub>E</sub>X. It also features an automatic tool that compiles the sources and makes the PDF files easily reachable directly from the Internet site.

JEAN-MICHEL HUFFLEN, Passare da L<sup>A</sup>T<sub>E</sub>X a XSL-FO [Switching from L<sup>A</sup>T<sub>E</sub>X to XSL-FO]; pp. 41–53

[Published in *TUGboat* 29:1.]

CLAUDIO BECCARI, La virgola intelligente [Smart decimal separator]; pp. 54–56

The decimal fractional part of a number must be separated from the integer part by means of a decimal

separator. ISO regulations specify a different sign for different languages; the internal L<sup>A</sup>T<sub>E</sub>X mathematical character codes do not help treating this sign in a simple way. Here we describe a few ways to handle this problem.

CLAUDIO BECCARI, The unknown `picture` environment; pp. 57–64

The old `picture` environment, introduced by Leslie Lamport into the L<sup>A</sup>T<sub>E</sub>X kernel almost 20 years ago, appears to be neglected in favor of more modern and powerful L<sup>A</sup>T<sub>E</sub>X packages that eliminate all the drawbacks of the original environment. Nevertheless, it is still being used behind the scenes by a number of other packages. Lamport announced an extension in 1994 that should have removed all the limitations of the original environment; in 2003 the first version of this extension appeared, in 2004 the first stable version was released; in 2009 it was extended with new functionality. Nowadays the `picture` environment can perform similarly to most simple drawing programs, but it has special features that make it invaluable.

LUIGI SCARSO, Extending ConT<sub>E</sub>Xt MkIV with PARI/GP; pp. 65–74

This paper shows how to build a binding to PARI/GP, a well known computer algebra system, for ConT<sub>E</sub>Xt MkIV, showing also some examples on how to solve some common basic algebraic problems.

EVENTI E NOVITÀ, Events and news; p. 75

***ArsTeXnica* #12 (October 2011)**

GIANLUCA PIGNALBERI, Editoriale [From the editor]; p. 5

CLAUDIO BECCARI, X<sub>q</sub>L<sup>A</sup>T<sub>E</sub>X and the PDF archivable format; pp. 6–11

Up to now X<sub>q</sub>L<sup>A</sup>T<sub>E</sub>X produces a final PDF output file but it gets this output by transforming an XDV (extended DVI) intermediate file. This excludes most of the possibilities offered by pdfL<sup>A</sup>T<sub>E</sub>X that, at least since version 1.40.9, and with the help of an extension file `pdfx.sty`, can directly produce a PDF/A-1b compliant output. This paper explains how to get through this bottleneck by resorting to the ubiquitous Ghostscript program.

AGOSTINO DE MARCO and ROBERTO GIACOMELLI, Creare grafici con `pgfplots` [How to create plots with `pgfplots`]; pp. 12–38

This article presents `pgfplots`, the package for the creation of plots based on PGF. The user manuals of both these extensions of the L<sup>A</sup>T<sub>E</sub>X language are very detailed and voluminous and users are often discouraged from studying these two documents.

In particular, those wishing to create high quality graphs have a difficult time disentangling the details of the many options and customizations. The article suggests a practical approach: It will be shown how a graph can be prepared by means of a correct initial setting of axes, thus introducing the basic commands and options. Then the way to plot curves and surfaces will be explained, suggesting how to possibly customize their appearance.

AGOSTINO DE MARCO and PAOLO EUGENIO CRESCI,  $\text{\LaTeX}$  nella pubblica amministrazione: La web application FACiLE per la produzione automatica di comunicazioni interne del Comune di Napoli [ $\text{\LaTeX}$  in the public administration: The FACiLE web application to automatically produce City of Naples internal letters]; pp. 39–56

This article describes the web application FACiLE in use at the administration of the City of Naples. The application was released in March 2011. It is integrated into the intranet software tools of the municipality and is currently under testing. Users are able to produce official internal communication letters which comply with the City of Naples Corporate Identity specifications. The application is designed to be perceived as a very simple tool and presents itself to the user as a web form for the production of a PDF document. Behind the scenes FACiLE runs the  $\text{\XeTeX}$  typesetting engine together with an ad hoc parser developed in the PHP language. The key aspect of the application is the design of a  $\text{\LaTeX}$  source template based on the `scr1ttr2` document class from the KOMA-script bundle.

PRESENTAZIONI DA ARST $\text{\TeX}$ NICA NUMERO 11, Presentations from Ars $\text{\TeX}$ nica no. 11; p. 57

JEAN-MICHEL HUFFLEN, An introductory presentation of XSL-FO; p. 58

This short statement aims to sketch the broad outlines of the presentation at the  $\text{\Gf}$  2011 meeting.

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