



## The Treasure Chest

Editor's note: This is Mark's final column. The editorial board would like to thank Mark for monitoring the CTAN announcements and compiling this collection since 2004.

This is a large but still incomplete list of the new packages posted to CTAN (<http://www.ctan.org>) in 2006, with descriptions either taken from the announcement or researched, then edited for brevity.

Entries are listed alphabetically within CTAN directories. A few entries which the editors subjectively believed to be of especially wide interest or otherwise notable are starred; of course, this is not intended to slight the other contributions!

Hopefully this column and its companions will help to make CTAN a more accessible resource to the T<sub>E</sub>X community. Comments are welcome, as always.

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### biblio

**alphabib** in `biblio/bibtex/utils`  
A Bash script allowing addition of alphabetical headers into B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> bibliographies.

**ijqc** in `biblio/bibtex/contrib`  
B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> style for the *International Journal of Quantum Chemistry*.

**jneurosci** in `biblio/bibtex/contrib`  
B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> style for the *Journal of Neuroscience*.

**mad2bib** in `biblio/bibtex/utils`  
Scripts to convert MAD to B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> and UTF-8 to L<sup>A</sup>T<sub>E</sub>X ASCII.

**mrcheckbib** in `biblio/bibtex/utils`  
B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> verification using the AMS MRef database.

**munich** in `biblio/bibtex/contrib`  
The Munich 'name (year)' style.

**rsc.bst** in `biblio/bibtex/contrib/misc`  
B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> styles for RSC journals.

**sort-by-letters** in `biblio/bibtex/contrib`  
Some B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> styles for sorting by initial letters.

**Synapsen** in `biblio/bibtex/utils`  
Java program for managing references.

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### fonts

**arial** in `fonts/urw`  
An Arial clone in Type 1 format.

**classico** in `fonts/urw`  
URW Classico, a clone of Hermann Zapf's Optima.

**cmll** in `fonts`  
Linear logic symbols for Computer Modern.

**emerald** in `fonts`  
Support for Emerald City Fontwerks fonts.

**enpassant** in `fonts/chess`  
Use free chess fonts from [www.enpassant.dk](http://www.enpassant.dk).

**foekfont** in `fonts`  
Fonts and L<sup>A</sup>T<sub>E</sub>X macros to use the title font of the Mads Foek magazine, <http://madsfoek.dk>.

**fonetika** in `fonts`  
Fonts for the Danish phonetic system Dania, based on URW Palladio and Iwona Condensed.

**indic** in `fonts/ps-type1`  
Indic Type 1 fonts for T<sub>E</sub>X converted from public METAFONT sources.

**JustFontItTE** in `fonts/utilities`  
Windows program with the functionality of standard T<sub>E</sub>X utilities such as `pltotf` and `vftovp`. Can create TFM files from PFB, TTF, OTF, and more.

**linearA** in `fonts`  
LinearA script.

**\*otfinst** in `fonts/utilities`  
Installs OpenType fonts for use in (L<sup>A</sup>)T<sub>E</sub>X systems.

**sarabian** in `fonts/archaic`  
Type 1 fonts for the South Arabian script in use from roughly 1000 to 600 BC.

**starfont** in `fonts/ps-type1`  
Support for the StarFont Sans astrological font.

**\*tex-gyre** in `fonts`  
Extensions of the well-known URW and other free fonts, much as Latin Modern is an extension of Computer Modern.

**thaifonts-scalable** in `fonts/thai`  
A collection of Thai scalable fonts.

**winfonts** in `fonts`  
Support for the Windows core fonts.

**xq** in `fonts`  
Fonts and macros for xiangqi (Chinese chess).

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### graphics

**AddTeX2Eps** in `graphics`  
Use L<sup>A</sup>T<sub>E</sub>X syntax on EPS figures from Mathematica.

**blockdraw.mp** in `graphics/metapost/contrib/macros`  
Block diagrams and bond graphs.

**cmarrows** in `graphics/metapost/contrib/macros`  
MetaPost arrows and braces in CM style.

**gapfill** in `graphics`  
Generate L<sup>A</sup>T<sub>E</sub>X picture environments by parsing PostScript files.

**gastex** in `graphics`  
L<sup>A</sup>T<sub>E</sub>X macros to draw automata, networks, etc., in the L<sup>A</sup>T<sub>E</sub>X picture environment.

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- m3D** in `graphics/metapost/contrib/macros`  
Three-dimensional drawing with METAPOST.
- MPStoEPS** in `graphics/metapost/contrib/misc`  
METAPOST to EPS converter.
- pedigree-perl** in `graphics/pstricks/contrib`  
Generate pedigrees in T<sub>E</sub>X from CSV files.
- prerex** in `graphics`  
Produce charts of course nodes linked by arrows representing pre- and co-requisites.
- pst-asr** in `graphics/pstricks/contrib`  
Autosegmental representations, used by linguists.
- pst-code** in `graphics/pstricks/doc/code`  
Original code documentation of PSTricks from Timothy Van Zandt.
- pst-coil** in `graphics/pstricks/contrib`  
Coils and zigzags as lines or node connections.
- pst-dbicons** in `graphics/pstricks/contrib`  
Typesetting ER diagrams in declarative style, using standard database terminology.
- pst-eps** in `graphics/pstricks/contrib`  
Exporting pspicture environments.
- pst-fill** in `graphics/pstricks/contrib`  
Filling and tiling of areas and characters.
- pst-grad** in `graphics/pstricks/contrib`  
Colored gradients.
- pst-ob3d** in `graphics/pstricks/contrib`  
Support for basic 3-dimensional objects.
- pst-pdgr** in `graphics/pstricks/contrib/pedigree`  
Draw medical pedigrees with PSTricks and L<sup>A</sup>T<sub>E</sub>X.
- pst-spectra** in `graphics/pstricks/contrib`  
Draw continuum, emission and absorption spectra.
- \*pst-text** in `graphics/pstricks/contrib`  
Typeset text on a path.
- splines** in `graphics/metapost/contrib/macros`  
MetaPost/METAPOST macros for drawing graphs of cubic splines.
- \*textpath** in `graphics/metapost/contrib/macros`  
Typeset text along a path with the help of L<sup>A</sup>T<sub>E</sub>X, so kerns are preserved and 8-bit input is supported.
- uml** in `graphics/pstricks/contrib`  
Writing UML diagrams in L<sup>A</sup>T<sub>E</sub>X.
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- language**
- \*arabi** in `language/arabic`  
Arabic and Farsi support in standard L<sup>A</sup>T<sub>E</sub>X via Babel, using several input encodings, including UTF-8. Includes good-quality free fonts.
- bghyph** in `language/hyphenation`  
Bulgarian hyphenation patterns.
- glhyph** in `language/hyphenation`  
Galician hyphenation patterns.
- hrlatex** in `language/croatian`  
Typical setup for Croatian users.
- mkbangtex** in `language/bengali`  
Preprocessor for BangT<sub>E</sub>X.
- magyar** in `language/hungarian/babel`  
Much improved Hungarian definitions for Babel.
- mexican** in `language`  
Modifications to Spanish for Mexican typography.
- mkpattern** in `language/hyphenation/utils`  
T<sub>E</sub>X program for generating hyphenation patterns.
- staves** in `language`  
Fonts and macros for the “magical” Icelandic staves as well as the runic letters used in Iceland.
- thailatex** in `language/thai`  
Babel-based Thai support with fonts.
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- macros/generic**
- dirtree** in `macros/generic/`  
Display directory trees.
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- macros/latex/contrib**
- abc** in `macros/latex/contrib`  
Support ABC Plus (`abcplus.sourceforge.net`) music notation in L<sup>A</sup>T<sub>E</sub>X.
- active-conf** in `macros/latex/contrib/conferences`  
Class for typesetting papers at the ACTIVE conference on noise and vibration control.
- akktex** in `macros/latex/contrib`  
Collection of new document classes and packages, easing creation of math documents in particular.
- arabicfront** in `macros/latex/contrib/bezoz`  
Number pages in Arabic numerals starting with the front matter.
- authoraftertitle** in `macros/latex/contrib`  
Make title, author and date available after `\maketitle`.
- auto-pst-pdf** in `macros/latex/contrib`  
Wrapper for `pst-pdf` with some `psfrag` features.
- boxhandler** in `macros/latex/contrib`  
Managing boxed objects such as tables and figures, with caption customization.
- bussproofs** in `macros/latex/contrib`  
Construction of proof trees in the style of the sequent calculus and other systems.
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- info**
- \*Free\_Math\_Font\_Survey** in `info`  
A survey of the free math fonts available for use with L<sup>A</sup>T<sub>E</sub>X. Vietnamese translation in the `vn` sub-directory.
- MemoirChapStyles** in `info`  
Memoir chapter style showcase.
- MFwL** in `info`  
*Making Friends with L<sup>A</sup>T<sub>E</sub>X*, a L<sup>A</sup>T<sub>E</sub>X introduction.
- l2picfaq** in `info/l2picfaq/german`  
Questions about L<sup>A</sup>T<sub>E</sub>X and pictures, and answers in the form of sample code.
- \*visualFAQ** in `info`  
A visual interface to the UK T<sub>E</sub>X FAQ.
- 
- `graphics/metapost/contrib/macros/m3D`

- \*cellspace** in `macros/latex/contrib`  
Minimal spacing of table cells to avoid touching `\hlines`.
- centernot** in `macros/latex/contrib/oberdiek`  
Horizontally center a `\not` symbol on its argument.
- chessboard** in `macros/latex/contrib`  
Typeset chessboards.
- classicthesis** in `macros/latex/contrib`  
Thesis style in homage to *The Elements of Typographic Style*.
- cool** in `macros/latex/contrib`  
Content Oriented L<sup>A</sup>T<sub>E</sub>X, retaining mathematical meaning in addition to the typesetting instructions.
- coollist** in `macros/latex/contrib`  
Manipulation of lists.
- coolstr** in `macros/latex/contrib`  
Manipulation of strings (sequences of characters, not tokens).
- cooltooltips** in `macros/latex/contrib`  
Associate a pop-up window and tooltip with a PDF hyperlink.
- coverpage** in `macros/latex/contrib`  
Supplement scientific papers with a cover page.
- dateiliste** in `macros/latex/contrib`  
Typeset the file list (like `\listfiles`), and more.
- digiconfigs** in `macros/latex/contrib`  
Small package for easily writing ‘configurations’, i.e., special  $\circ$  +  $\bullet$  matrices.
- disser** in `macros/latex/contrib`  
Document class and templates for dissertations in Russian.
- draftwatermark** in `macros/latex/contrib`  
Typeset a light gray watermark of user-defined text on the first page or every page of a document.
- duerer-latex** in `macros/latex/contrib`  
L<sup>A</sup>T<sub>E</sub>X support for the *duerer* fonts.
- dvdcoll** in `macros/latex/contrib`  
Typeset DVD (or similar) collection overviews.
- dyntrree** in `macros/latex/contrib`  
Typeset Dynkin Tree Diagrams from group theory.
- eskdX** in `macros/latex/contrib`  
Implement Russian standards for designers.
- everypage** in `macros/latex/contrib`  
Provides hooks to be run on each page of a document.
- exceltex** in `macros/latex/contrib`  
Access Excel files from L<sup>A</sup>T<sub>E</sub>X.
- extpfeil** in `macros/latex/contrib`  
Extensible arrows and commands to create new ones.
- faktor** in `macros/latex/contrib`  
Typeset quotient structures.
- flipppdf** in `macros/latex/contrib`  
Produce a “mirrored” version of the document, for typesetting on transparent film.
- forloop** in `macros/latex/contrib`  
Provides the command `\forloop`.
- gmdoc** in `macros/latex/contrib`  
Documenting packages with minimal markup and hyperlinks. Needs the other new packages `gmiflink`, `gmverb`, and `gmutils` from the same author.
- gnuplottex** in `macros/latex/contrib`  
Generate and include Gnuplot (<http://gnuplot.info>) graphs in L<sup>A</sup>T<sub>E</sub>X.
- gu** in `macros/latex/contrib`  
Typeset crystallographic group-subgroup-schemes in Bärnighausen formalism.
- hyperxmp** in `macros/latex/contrib`  
Embed XMP metadata within a L<sup>A</sup>T<sub>E</sub>X document.
- icsv** in `macros/latex/contrib/conferences`  
Class for typesetting papers at the ICSV conference.
- isodoc** in `macros/latex/contrib`  
Producing customizable letters, invoices, etc.
- labelcas** in `macros/latex/contrib`  
Tests and branches depending on label existence.
- lewis** in `macros/latex/contrib`  
Rudimentary support for drawing Lewis Structures.
- lingtrees** in `macros/latex/contrib`  
Linguistic tree macros and preprocessor.
- lsc** in `macros/latex/contrib`  
Typesetting Live Sequence Charts, similar to `msc`.
- marginnote** in `macros/latex/contrib`  
Marginal notes where `\marginpar` fails.
- minipage-marginpar** in `macros/latex/contrib`  
Allow `\marginpar` commands outside minipages; an alternative approach to `marginnote`.
- moderncv** in `macros/latex/contrib`  
Typesetting modern curriculum vitae, in classic and casual styles.
- nih** in `macros/latex/contrib`  
Class for grant applications to the US government National Institutes of Health.
- noitcruL** in `macros/latex/contrib`  
Underlining with italic correction (in math).
- opteng** in `macros/latex/contrib`  
Manuscript template for *SPIE Optical Engineering* and *OE Letters*, including page length estimates.
- pandora-latex** in `macros/latex/contrib`  
L<sup>A</sup>T<sub>E</sub>X support for the *pandora* fonts.
- papercdcase** in `macros/latex/contrib`  
Origami-style folding paper CD cases.
- pauldoc** in `macros/latex/contrib`  
Helpers for German-language L<sup>A</sup>T<sub>E</sub>X package documentation.
- pax** in `macros/latex/contrib`  
Avoid pdfL<sup>A</sup>T<sub>E</sub>X’s stripping of PDF annotations in included PDF files, via an external Java program.
- pinlabel** in `macros/latex/contrib`  
Attach formatted T<sub>E</sub>X labels to new or existing figures and diagrams.
- \*pracjourn** in `macros/latex/contrib`  
Document class for *The PracT<sub>E</sub>X Journal*, <http://tug.org/pracjourn>.

- punk-latex** in `macros/latex/contrib`  
 L<sup>A</sup>T<sub>E</sub>X support for the **punk** fonts.
- qtree** in `macros/latex/contrib`  
 Typeset tree diagrams, especially for linguistics.
- randbild** in `macros/latex/contrib`  
 Put small plots of curves in the margin.
- \*randtext** in `macros/latex/contrib`  
 Typeset obfuscated text to foil spam email address harvesters. Supersedes `switcheml`.
- ratex** in `macros/latex/contrib`  
 Producing German legal documents, e.g., lawsuits.
- recipecard** in `macros/latex/contrib`  
 Typesets recipes into note card sized boxes.
- robustcommand** in `macros/latex/contrib`  
 Variant of `\DeclareRobustCommand` which checks if the command has already been defined.
- screenplay** in `macros/latex/contrib`  
 Screenplay formatting as recommended by the Academy of Motion Picture Arts and Sciences.
- seqsplit** in `macros/latex/contrib`  
 Splitting long sequences of letters without spaces, such as DNA, RNA, proteins, etc.
- showexpl** in `macros/latex/contrib`  
 Show L<sup>A</sup>T<sub>E</sub>X code and typeset result from one source.
- sikumna** in `macros/latex/contrib/lyx`  
 Extended LyX layout style for use in Sikumna, <http://www.sikumuna.co.il>.
- simplewick** in `macros/latex/contrib`  
 Drawing Wick contractions above and below expressions in math mode.
- spotcolor** in `macros/latex/contrib`  
 Include spot colors in pdfL<sup>A</sup>T<sub>E</sub>X output.
- stackel** in `macros/latex/contrib/oberdiek`  
 Adds optional argument to `\stackrel` for including something below the relation, and defines `\stackbin` for binary symbols.
- stellenbosch** in `macros/latex/contrib`  
 Typesetting dissertations, theses and reports of the University of Stellenbosch, South Africa.
- \*sudokubundle** in `macros/latex/contrib`  
 Typesetting, solving, and creating Sudoku puzzles; over 50 puzzles are included.
- sugconf** in `macros/latex/contrib/conferences`  
 Document class for SAS user group proceedings.
- susy** in `macros/latex/contrib`  
 Support for supersymmetry-related documents.
- svn-multi** in `macros/latex/contrib`  
 Typesetting Subversion keywords, including documents with multiple source files.
- syntrace** in `macros/latex/contrib`  
 Support for tracing trees created with the `syntree` package.
- tabto** in `macros/latex/contrib`  
 Tabbing to fixed positions in a paragraph.
- technica** in `macros/latex/contrib`  
 A suite of packages for typesetting literary texts.
- telprint** in `macros/latex/contrib/oberdiek`  
 Formatting German telephone numbers.
- tengwarscript** in `macros/latex/contrib`  
 Mid-level access to the `tengwar` fonts with good default output.
- thesis-titlepage-fhAC** in `macros/latex/contrib`  
 Title page for Fachschule Aachen theses.
- thuthesis** in `macros/latex/contrib`  
 Thesis template for Tsinghua University.
- titlepage-uni-dortmund** in `macros/latex/contrib`  
 Title page layout for the University of Dortmund.
- toptesi** in `macros/latex/contrib`  
 Bundle for thesis typesetting in Italy, supporting any language.
- wordlike** in `macros/latex/contrib`  
 Simulates standard word processor layout and fonts.
- xifthen** in `macros/latex/contrib`  
 Extended if-then features.
- xyling** in `macros/latex/contrib`  
 Draw syntactic trees and other linguistic constructs, based on X<sub>Y</sub>-pic.
- xytree** in `macros/latex/contrib`  
 Tree drawing package using X<sub>Y</sub>-pic.
- 
- macros/latex/exptl**
- \*biblatex** in `macros/latex/exptl`  
 Reimplementation of the bibliographic facilities provided by L<sup>A</sup>T<sub>E</sub>X in conjunction with B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>: B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> is used only for sorting and producing labels, and bibliography formatting is controlled entirely by T<sub>E</sub>X macros, not B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> style files. Still experimental.
- xbase** in `macros/latex/exptl`  
 Provides L<sup>A</sup>T<sub>E</sub>X3 packages `xparse` and `template`.
- 
- macros/omega**
- fontch** in `macros/omega/latex/contrib`  
 Typeset Malayalam using Omega.
- 
- macros/xetex**
- euenc** in `macros/xelatex/latex`  
 Unicode font encoding definitions for X<sub>ƒ</sub>T<sub>E</sub>X.
- grchyp** in `macros/xetex/hyphenation`  
 Unicode hyphenation patterns for ancient Greek.
- ifxetex** in `macros/xetex/latex`  
 Provides the `\ifxetex` conditional.
- sanhyph** in `macros/xetex/hyphenation`  
 Unicode hyphenation patterns for Prakrit and Sanskrit in Devanagari, Bengali, Kannada, Malayalam and Telugu scripts.
- xetex-greek** in `macros/xetex/hyphenation`  
 Standard Greek hyphenation patterns adapted for X<sub>ƒ</sub>T<sub>E</sub>X.
- \*xlxtra** in `macros/xetex/latex`  
 Additional L<sup>A</sup>T<sub>E</sub>X features for X<sub>ƒ</sub>T<sub>E</sub>X.

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**support**
**cms4talks in support**

A Java-based content management system for talks written in L<sup>A</sup>T<sub>E</sub>X.

**dinbrief-gui in support**

Graphical interface for the dinbrief T<sub>E</sub>X package.

**\*escapeTeXt in support**

Modular Python program to massage plain text so it can likely pass through L<sup>A</sup>T<sub>E</sub>X.

**gentabtex in support**

Table rendering engine written in Python.

**orderer in support**

Reorder references in a L<sup>A</sup>T<sub>E</sub>X document by order of citation.

**pkfix in support**

Replaces resolution-dependent bitmapped fonts in a dvips-produced PostScript file with the corresponding resolution-independent vector fonts.

**rfile in support**

The Ruby font installer library (RFILE) attempts to manage installation of T<sub>E</sub>X fonts.

**word-to-latex in support**

Windows program to convert Microsoft Word documents to L<sup>A</sup>T<sub>E</sub>X or XML.

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**systems**
**visualtex in systems/win32**

Visual T<sub>E</sub>X text editor.

We end this installment of Treasure Chest with the covers from the newly released T<sub>E</sub>X Collection 2007, now being mailed to user group members. See <http://tug.org/texcollection> for more information.

