The Treasure Chest

This is a list of selected new packages posted to CTAN (http://www.ctan.org) from June 2008–June 2009, with descriptions based on the announcements and 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.

We hope this column and its companions will help to make CTAN a more accessible resource to the TEX community. Comments are welcome, as always.

⋄ Karl Berry
http://tug.org/ctan.html

biblio

chembst in biblio/bibtex/contrib
    BIBTEX style files for chemistry journals.

dviware

dviasm in dviware
    Script for disassembling and reassembling DVI files, including adding preprint numbers and watermarks.

fonts

boisik in fonts
    A Metafont font inspired by Baskerville.
dozenal in fonts
    Fonts and macros for typesetting documents in base 12 (Dozenal).
* gentium in fonts
    TrueType fonts from SIL, pdfTEX files for many encodings (agr, t2a, ec/T1, texnansi, l7x, qx, t5), and support files for ConTEXt.
inconsolata in fonts
    Original monospace font with LATEX support for several encodings.
junicode in fonts
    TrueType font for medievalists with many Open-Type features.
libris in fonts
    Sans-serif family similar to the well-known Lydian.
phaistos in fonts/archaic
    All symbols from the Disc of Phaistos (produced via punches in clay, probably around 1700 BCE).
pigpen in fonts
    Font and macros for Pigpen (masonic) ciphers.

shuffle in fonts
    A symbol for the shuffle product.
tolkienfonts in fonts
    Virtual fonts for writing English, Quenya, and Sindarin with various free Tolkien-world fonts.

graphics

* asymptote in graphics
    Vector graphics language for technical drawing, inspired by MetaPost but with a C++-like syntax.
autoarea in graphics/pictex/addons
    Have PiCTEX recognize lines and arcs in determining bounding boxes.
bclogo in graphics/pstricks/contrib
    PSTricks macros for colorful boxes with a title and logo.
circuitikz in graphics/pgf/contrib
    Drawing electrical circuits with PGF/TikZ.
jpgfdraw in graphics
    Graphics application written in Java providing integration with a variety of TEX packages as well as basic drawing capabilities.
metago in graphics/metapost/contrib/macros
    MetaPost package for Go game positions.
psbao in graphics/pstricks/contrib
    PSTricks macros for drawing Bao (game) diagrams.
pst-bezier in graphics/pstricks/contrib
    PSTricks macros for drawing a Bezier curve with full control.
pst-bspline in graphics/pstricks/contrib
    Draws uniform Bspline curves and interpolations.
pst-gantt in graphics/pstricks/contrib
    PSTricks macros for drawing Gantt charts.
pst-sigsys in graphics/pstricks/contrib
    PSTricks macros for disciplines related to signal processing.
pst-support in graphics/pstricks/contrib
    Support for PSTricks in Distiller and TEXnicCenter.
schemabloc in graphics/pgf/contrib
    PGF/TikZ macros for block diagrams.
tikz-inet in graphics/pgf/contrib
    TikZ macros and shapes for interaction nets.
tikz-timing in graphics/pgf/contrib
    Generating timing diagrams with TikZ.
vaucanson-g in graphics/pstricks/contrib
    PSTricks macros for automata.
* xetex-pstricks in graphics
    Configuration files to use PSTricks with XƎTEX.

info

amslatex/primer in info
    Getting up and running with AMSLATEX.

info/amslatex/primer

Aro-Bend in `info/challenges`
    Collection of the TeX macro programming challenges "Around the Bend", by Michael Downes.

Doc-PiCTeX.txt in `info/pictex`
    Concise reference information on PiCTeX.

*first-latex-doc in `info`
    Guide to trying out LaTeX for the first time, using mathematical documents.

intro-scientific in `info`
    Introduction to typesetting scientific or mathematical documents using LaTeX.

latex-course in `info`
    A LaTeX course as a Beamer slide presentation, based on the German `tex-kurs`.

*latex-doc-ptr in `info`
    Pointers to major LaTeX guides in most areas.

*latexcheat in `macros/latex/contrib`
    Single-sheet LaTeX reference.

lnotes in `info`
    Introduction to (LA)TeX in Chinese.

lshort-chinese in `info/lshort`
    Chinese translation of the `lshort` document.

lshort-mongol in `info/lshort/mongolian`
    Mongolian translation of the `lshort` document.

*Math_into_LaTeX-4 in `info`
    George Grätzer's series of video presentations introducing LaTeX.

mpman-ru in `info/metapost/doc/russian`
    Russian translation of the MetaPost user manual.

pstdoc in `info`
    PSTricks help system using Python.

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language

casyl in `language`
    Cree/Inuktitut in Canadian Aboriginal Syllabics.

dehyph-exptl in `language/hyphenation`
    Experimental hyphenation patterns for German, covering traditional and reformed orthography.

hyph-utf8 in `language`
    TeX hyphenation patterns converted to UTF-8 while retaining compatibility with previous patterns.

georgian in `language`
    Georgian language support for (LA)TeX.

lithuanian in `language`
    Lithuanian language support: hyphenation, `babel`, fonts, and more.

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macros/generic

encxvlna in `macros/generic`
    Insert nonbreakable spaces required by Czech and Slovak typographical rules, based on encTeX.

tex-ewd in `macros/generic`
    Typeset calculational proofs and programs in Dijkstra's "guarded command language".

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macros/latex/contrib

alterqcm in `macros/latex/contrib`
    Creating multiple choice questionnaires.

analogclock in `macros/latex/contrib`
    A ticking analog clock for pdfLaTeX documents and presentations.

arsclassica in `macros/latex/contrib`
    Reproduces the look of the Italian guide 'The art of writing with LaTeX'.

asyfig in `macros/latex/contrib`
    Support for standalone `.asy` figure files.

beamerposter in `macros/latex/contrib`
    Create custom-sized LaTeX posters, e.g., double DIN-A0 size in landscape or portrait orientation. Poster fonts can be scaled.

bezos in `macros/latex/contrib`
    New `subdocs` style sharing `.aux` files between parts.

blowup in `macros/latex/contrib`
    Scale all pages of a document up or down, similar to plain TeX's `\magnification`.

calctable in `macros/latex/contrib`
    Typeset accounting and other tables with automatic sum and percentage computations.

chletter in `macros/latex/contrib`
    Typesetting letters and small documents according to Swiss rules.

codedoc in `macros/latex/contrib`
    Produce LaTeX code and documentation in a single file with ordinary LaTeX syntax.

collref in `macros/latex/contrib`
    Merge blocks of references into one `\bibitem`.

cpssp in `macros/latex/contrib`
    Draw protein secondary structures.

csbulletin in `macros/latex/contrib`
    Zpravodaj (CSTUG bulletin) article style.

diagmac2 in `macros/latex/contrib`
    Reynolds diagram macros supporting any line slope.

drac in `macros/latex/contrib`
    Declare "robust active characters", an active character which can be used in moving arguments.

ean13isbn in `macros/latex/contrib`
    Generate ISBN barcodes in EAN13 format, as used after January 1, 2007.

easylist in `macros/latex/contrib`
    Creating customizable lists of numbered items with a single active character.

elsarticle in `macros/latex/contrib`
    Document class for articles submitted to Elsevier.

eltex in `macros/latex/contrib`
    Draw electric circuit diagrams according to IEC 617.

emptypage in `macros/latex/contrib`
    Suppress page numbers and headings on empty pages.

eukdate in `macros/latex/contrib`
    Change `\today` to the UK format, including weekday, as in 'Friday, 25 June 2008'.

exp-testopt in `macros/latex/contrib`
Expandable `\@testopt`.

figbas in `macros/latex/contrib`
Mini-fonts for figured-bass music notation.

forarray in `macros/latex/contrib`
Process lists and arrays in LaTeX, including nesting.

gmdoc-enhance in `macros/latex/contrib`
Enhancements for `gmdoc`.

gmverse in `macros/latex/contrib`
Typesetting (short) poems.

getfiledate in `macros/latex/contrib`
Fetch and format the last modification time of a local file.

greekdates in `macros/latex/contrib`
Support ancient Greek names of days, months, etc.

* grid in `macros/latex/contrib`
Grid-based typesetting in double-column documents.

hypdvips in `macros/latex/contrib`
Improve hyperref support with the Dvips driver.

javadoc in `macros/latex/contrib`
Document source code.

inlinedef in `macros/latex/contrib`
Selective expansion within a definition.

ionumbers in `macros/latex/contrib`
Restyle numbers in math mode.

isomath in `macros/latex/contrib`
Typeset math according to ISO 31.

liturg in `macros/latex/contrib`
Typeset Catholic liturgical texts, particularly Missal and Breviary texts.

logical-markup-utils in `macros/latex/contrib`
Language-dependent inline quotes and dashes.

macqassign in `macros/latex/contrib`
Typeset Macquarie University assignments.

makebarcode in `macros/latex/contrib`
Produce various 2/5 and Code 39 barcodes, using only `\vrule`.

metalogo in `macros/latex/contrib`
Expose spacing parameters for TeX logos, so they can be optimized for different fonts.

minibox in `macros/latex/contrib`
Boxes allowing manual line breaks and shrinking to the maximum natural line width.

modref in `macros/latex/contrib`
Customize cross-references in LaTeX.

multiobjective in `macros/latex/contrib`
Provide operators used in fields related to multiobjective optimization.

nicetext in `macros/latex/contrib`
Minimal markup syntax for simple wiki-style text.

pagecont in `macros/latex/contrib`
Page numbering continuation between documents.

pdfcomment in `macros/latex/contrib`
Friendly interface to PDF annotations.

pdfmarginpar in `macros/latex/contrib`
Improved `\marginpar` with read-only PDF annotations.

* pdfx in `macros/latex/contrib`
PDF/X-1a and PDF/A-1b support for pdfTeX.

pgfopts in `macros/latex/contrib`
Extends `pgfkeys` to handle LaTeX class and package options, much as `kvoptions` extends `keyval`.

* pstool in `macros/latex/contrib`
Optimized conversion of PSTricks figures to PDF, with `psfrag` support.

psu-thesis in `macros/latex/contrib`
Thesis package for Penn State University.

rcs-multi in `macros/latex/contrib`
Typesetting RCS or CVS keywords, with support for multi-file documents.

sageep in `macros/latex/contrib`
LaTeX style for papers at the Environmental and Engineering Geophysical Society's Annual Meeting.

* silence in `macros/latex/contrib`
Selective filtering of error messages and warnings.

siunitx in `macros/latex/contrib`
A comprehensive (SI) units package.

steinmetz in `macros/latex/contrib`
Produce the electrotechnics Steinmetz notation.

svn-prov in `macros/latex/contrib`
Variants of `\ProvidesPackage`, etc., with information automatically determined from Subversion.

syllogism in `macros/latex/contrib`
Typeset syllogisms and syllogistic-style arguments.

tabularcalc in `macros/latex/contrib`
Automatic calculation of values in a numeric table.

tabularew in `macros/latex/contrib`
Handle centering of multicolumn headings.

tdclock in `macros/latex/contrib`
A ticking digital clock for pdfLaTeX documents and presentations.

tdsfrmath in `macros/latex/contrib`
Facilitate use of LaTeX for French math teachers.

termlist in `macros/latex/contrib`
Label any kind of term with an increasing sequence of numbers, as with equation numbers.

theoremref in `macros/latex/contrib`
Automatically typeset theorem names in references.

tkz-doc in `macros/latex/contrib`
Documentation macros for `tkz-*` packages.

tkz-linknodes in `macros/latex/contrib`
Based on PGF/TikZ, provides for linking elements of `amsmath` environments such as `\align`.

todonotes in `macros/latex/contrib`
Let authors mark things to do in a LaTeX document.

totcount in `macros/latex/contrib`
Compute and display the last value of counters (sections, pages, etc.).

tufte-latex in `macros/latex/contrib`
: Document classes inspired by the books and work of Edward Tufte.

ucdavisthesis in `macros/latex/contrib`
: Thesis/dissertation class for UC Davis.

ulqda in `macros/latex/contrib`
: Support for the field of qualitative data analysis.

verbatimbox in `macros/latex/contrib`
: Store verbatim text in a LaTeX box, for use in places where the `verbatim` environment is not allowed.

vwcol in `macros/latex/contrib`
: Typesetting multicolumn paragraph text with different column widths on a single page.

xstring in `macros/latex/contrib`
: String manipulation: tests, substrings, substitutions, length, and more.

yagusylo in `macros/latex/contrib`
: An extended `pifont`, with macros for obtaining one glyph, drawing lines and filling, list environments.

zwgetfdate in `macros/latex/contrib`
: Fetch dates of used packages and files for macros.

zwpagelayout in `macros/latex/contrib`
: Page layout, cropmarks, and reflected pages.

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macros/latex/exptl

biblatex-apa in `macros/latex/exptl/biblatex-contrib`
: APA citation and reference style for `biblatex`.

biblatex-chem in `macros/latex/exptl/biblatex-contrib`
: Experimental chemistry styles for `biblatex`.

biblatex-chicago-notes-df in `macros/latex/exptl/biblatex-contrib`
: Chicago "notes & bibliography" style files.

biblatex-historian in `macros/latex/exptl/biblatex-contrib`
: A `biblatex` style based on the Turabian Manual.

biblatex-jura in `macros/latex/exptl/biblatex-contrib`
: A `biblatex` style for German legal literature.

biblatex-nature in `macros/latex/exptl/biblatex-contrib`
: A `biblatex` style for *Nature*.

biblatex-zeitschrift in `macros/latex/exptl/biblatex-contrib`
: A `biblatex` style for *Historische Zeitschrift*.

cfr-lm in `macros/latex/exptl`
: Enhanced support for GUST's Latin Modern fonts.

keys3 in `macros/latex/exptl`
: Key management for LaTeX3.

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macros/luatex

luainputenc in `macros/luatex/latex`
: Standard `inputenc` package adapted for LuaTeX.

luamcallbacks in `macros/luatex/generic`
: Register multiple functions in LuaTeX callback.

∗luamplib in `macros/luatex/generic`
: Use MetaPost natively from LuaTeX.

∗luaotfload in `macros/luatex/generic`
: OpenType font loading for (LA)TeX, with syntax similar to XeTeX.

luatextra in `macros/luatex/generic`
: Core additional functionality for LuaTeX.

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macros/xetex

harvardkyoto in `macros/xetex/generic`
: Harvard/Kyoto input mapping for XeTeX Unicode Devanagari (0900–097F).

fontwrap in `macros/xetex/latex`
: Bind fonts to Unicode blocks, for automatic font tagging of multilingual text.

mathspec in `macros/xetex/latex`
: Typeset math in XeLaTeX using any text font.

∗polyglossia in `macros/latex/contrib`
: Multilingual XeLaTeX, with over 50 languages.

xecjk in `macros/xetex/latex`
: Typeset Chinese/Japanese/Korean with XeLaTeX.

xecolour in `macros/xetex/latex`
: Defines many colors for use in XeTeX, including in bidirectional text.

xelibertine in `macros/xetex/latex`
: Support the OpenType font Libertine.

xepersian in `macros/xetex/latex`
: Typeset Persian and Arabic with XeLaTeX.

xetexfontinfo in `macros/xetex/plain`
: Query fonts for their supported features.

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support

acroreloadpdf in `support`
: JavaScript to add reload support to Adobe Reader, under Unix-ish systems.

ctanify in `support`
: Prepare a LaTeX package for upload to CTAN.

ctantools in `support`
: Search LaTeX packages on CTAN from the command line.

firefox_ctan_plugins in `support`
: CTAN search plugins for Firefox.

fragmaster in `support`
: Produce PDF from EPS with `psfrag` substitutions applied.

meper in `support`
: Java program for editing and previewing MetaPost.

texdirflatten in `support`
: Perl script that recursively follows a LaTeX document, outputting all graphics and other files into a single directory.

texloganalyser in `support`
: Perl script to display selected parts of a LaTeX log.