## The Treasure Chest

## Packages posted to CTAN

Did you know that CTAN has two different packages for balancing columns? (At least two: balance in .../other/preprint and flushend.sty in .../sttools.) That there are packages for drawing graphical clock faces and dice? (clock and dice3d in fonts/dice.) That there is a tool for determining if all files needed by a given package are installed? (Appropriately enough, named diagnose.) That there is a package for typesetting exams, along with their answer keys? (examdesign) Or that there is even a "toolbox" of macros "for various tasks often needed in TEX programming"? (toolbox of course.) A veritable "Treasure Chest", no?

This is a list of packages posted to CTAN from July 2001 through June 2002, with descriptive text pulled from the announcement or researched at need and edited for brevity. All errors are ours.

Each month's list of packages are in alphabetic order; a package is only listed in the last month in which it was updated. Leading slashes are omitted from URLs, since the prefix will depend on the particular CTAN server you use. To save space, we have omitted the directory name macros/latex/contrib for packages residing there (a large proportion), and those in subdirectories of that branch are denoted by ...; for example, url.sty (in macros/latex/contrib/misc) would be shown as being in .../misc. Furthermore, when we list an entire directory, we don't repeat the directory name.

This edition of Treasure Chest was split between the authors: Mark wrote the entries for July – December 2001, and Will for January – June 2002. Will is bowing out as of this column — a big thank you from the editors. Mark will continue for future installments.

Hopefully this column and those which follow will help to make CTAN a more accessible resource to the TeX community.

## July 2001

2in1 in .../misc

LATEX style file for printing two pages on a single landscape page.

## alphanum in biblio/bibtex/contrib

Bibliography style that omits the year, and uses a number instead of a letter.

ascelike Unofficial IATEX class and bibliography stylefiles for ASCE documents (American Society of Civil Engineers).

### bibfind in biblio/bibtex/utils

Reads a .bib file and prints those references matching a search string. It works a bit like grep, only it prints the whole reference (paragraph) and not just the line that matches.

## comprehensive in info/symbols

This is a major update to the Comprehensive LATEX Symbol List. Not only does it contain hundreds of new symbols, but the symbol tables have been reordered into a more logical structure; the document begins with a "frequently requested symbols" list, and there is a new, quick reference table for Latin 1. The result is that LATEX symbols should be easier to find than ever before.

esvect Write vectors with an arrow different than the Computer Modern one.

### gellmu in support

LATEX-like markup for writing XML documents.

hypernat Allows use of hyperref and natbib.

### iahyphen in language/hyphenation

Hyphenation patterns for Interlingua.

jadetex Processes the output from Jade/OpenJade in TEX (-t) mode. Development has moved to http: //jadetex.sourceforge.net.

## latable in support

A near-WYSIWYG editor for LATEX tables.

lineno Adds line numbers to selected paragraphs with references possible via the standard LATEX \ref and \pageref cross reference mechanism.

MiKTeX-WinEdt-TrueType-Anleitung in info/german German information about MiKTEX, WinEdt, and TrueType.

## mpattern in graphics/metapost/macros Patterns in METAPOST.

## neuron in bibliography/bibtex/contrib

A bibliography style for use in submitting manuscripts to the journal Neuron (www.neuron.org).

## pdfcrypt.sty in .../oberdiek

Allows the setting of PDF encryption options for pdfTeX and VTeX.

## pkfix in support

Replace pk fonts with Type 1 in PostScript files.

SIunits Typeset physical units following the rules of the International System of Units (SI).

t-angles Draws tangles, trees, Hopf algebra operations, and other pictures.

## August 2001

amstex in macros

 $\mathcal{A}_{\mathcal{M}}\mathcal{S}$ TEX version 2.2.

## arraymaker in support

This Tcl/Tk program is designed to take some of the tedium out of constructing arrays, diagrams and tables. LATEX code is entered into an array of blank boxes and arrows can be added with a mouse click. The program then outputs an array that can be pasted into a LATEX file.

## binhex in macros/generic/kastrup

Convert numbers into binary, octal and hex.

bitfield Draws bitfield diagrams.

biocon Aids typesetting of biological species names, and of taxa below the species level.

booklet Provides some aids for printing simple booklets or signatures for longer books.

#### bundledoc in support

This post-processor for the snapshot package bundles together all the classes, packages, and files for building a given LATEX document.

As an added bonus, this distribution includes a small script called arlatex, a LATEX-specific archiving program that combines a bunch of files into a single .tex file. When the .tex file is run through latex, all of the original files are recreated and the LATEX document is built.

crossreference Cross-referencing package to help provide traceability for technical documents, especially Software Requirements Specifications.

dashbox Draws dashed boxes.

datenumber Provides commands to convert a date into a number and vice versa.

ebezier An extension of the (old) package bezier.sty which is currently part of L<sup>A</sup>TEX  $2\varepsilon$ . It defines linear and cubic Bernstein polynomials together with some plotting macros for arcs.

## examples in info/metapost

A few hundred example pictures drawn with META-POST, ranging from very simple (lines and circles) to rather intricate (uncommon geometric transformations, fractals, bitmaps, etc.).

filecontents The environments filecontents and filecontents\* enable a LATEX source file to generate external files as it runs. However, these environments have two limitations: they refuse to overwrite existing files; and they can be used only before the \documentclass declaration. This package removes these limitations.

float Improves the interface for defining floating objects, such as figures and tables. Introduces the boxed float, the ruled float, and the plaintop float.

#### framed in .../misc

Creates framed or shaded regions that can break across pages.

#### greenpoint in fonts

METAFONT implementation of the logo commonly known as "Der Gruene Punkt" ("The Green Point"). In Austria, it can be found on nearly every bottle. It should not be confused with the "Recycle" logo, implemented by Ian Green.

### musixps in fonts/musixtex/ps-type1

This package provides PostScript (Type 1) fonts (PFB format), and dvips and dvipdfm map files for MusiXTFX.

### ps2eps in support

A tool to produce EPS/EPSF files from typical one-paged PostScript documents. Requirements: Perl, Ghostscript and an ANSI C compiler if your plat-form is not Linux, Solaris, Digital UNIX or Windows 2000/9x/NT (binaries included).

revtex Includes styles for the journals of the American Physical Society, American Institute of Physics, and Optical Society of America.

## ruhyphen in language/hyphenation

Updates to this package for Russian hyphenation.

slideshow This is a set of METAPOST macros which simplify creating a PDF presentation using META-POST and Ghostscript.

uiucthesis University of Illinois at Urbana-Champaign thesis style.

warning This package provides a command that generates a list of warnings that are printed out at the very end of the logfile. This is useful for notes such as "Rerun for this or that reason" or "This is draft, change this before the final run".

#### xl2latex in support

Convert Excel (97 and above) tables to LATEX.

### September 2001

boites Defines environments that allow page breaks inside framed boxes. A few examples are included (shaded box, box with a wavy line on its side, etc.).

#### brushcr in fonts

This Type 1 font, named BrushScriptX-Italic, simulates hand-written characters.

## circuit\_macros in graphics

A set of macros for drawing high-quality electric circuit diagrams containing fundamental elements, amplifiers, transistors, and basic logic gates to include in TeX, LATeX, or similar documents. Some tools and examples for other types of diagrams also included

combine The combine class lets you bundle individual documents into a single document, such as when preparing a conference proceedings.

## frankenbundle in support

Allows an author to maintain and distribute a bundle of one or more LATEX packages, classes, BIBTEX bibliography styles, documentation, etc.

frankenstein A collection of LATEX/BIBTEX macros.

## ifvtex.sty in .../oberdiek

Looks for VTEX, defining the conditionals \ifvtex, \ifvtex<mode>, and \ifvtexgex.

## JavaBib in biblio/bibtex/utils

A BibTeX reference manager written in Java.

register Typesets the programmable elements in digital hardware, i.e., registers.

### TkTeXCAD in graphics

A Tk-Python script which provides a graphical user interface to the picture environment.

### October 2001

#### belleek in fonts

The Belleek fonts described in Richard Kinch's paper at TUG'98.

#### bibweb in biblio/bibtex/utils

A utility for automatically retrieving bibliographical information from the American Mathematical Society's MathSciNet program.

clock Provides various graphical and textual clocks for TeX and LATeX  $2\varepsilon$ . Renamed from texclock.

## cm-super in fonts/ps-type1

Update to the huge CM-Super font package.

## eps2pdf in support

Converts EPS files to PDF files.

**euro** Converts arbitrary national currency amounts using the Euro as a base unit.

## frenchle in language/french

Better support for hyperref and pdfscreen.

hitec This document class for technical papers in the "hi-tec" industry aims to escape from the academic look of the well-known LATEX document classes.

## mathtimepro in .../psnfssx

For using Y&Y's new math font set MathTimeProfessional with LATEX.

## montexiv in language/mongolian

MonTeX Implementation Level IV offers vertical texts in Mongolian and Manju, intermixed with Latin texts.

onlyamsmath This package inhibits the usage of plain TEX and standard LATEX math environments. Useful for class writers who want to force clients to use the environments provided by the amsmath package.

pdftricks Support for pstricks in pdfTeX.

## psgo in graphics/pstricks/contrib/psgo Draws Go diagrams with LATEX.

repeatindex Repeats item of an index if a page or column break occurs within a list of subitems.

## swline in macros/generic/swrule.sty

Typesets swelled rules: lines that are thicker in the middle than at the ends.

technics For writing technical documents. Uses the fancyhdr package to build headers containing document name, prepared by, approved by, etc.

## TeXnicCenter in systems/win32

An integrated development environment (IDE) for developing LATEX documents on Windows.

#### tipa in fonts/tipa

Updates for Concrete, Palatino, CM Bright, and CM Type 1 TIPA (TEX International Phonetic Association) fonts.

## tmmath in .../psnfssx

 $ext{ETEX}$  packages for using MicroPress's TM-Math fonts.

### tt2001 in fonts/ps-type1

This is a T<sub>E</sub>X .pfb font collection that contains almost all the EC (European Computer Modern) and TC (Text Companion) fonts in all possible design sizes, all the AMS fonts in all possible design sizes, plus some more.

underscore Package update adds a [nohyphen] option and compatibility with babel's active characters.

#### November 2001

adrconv Converts BibTeX databases of addresses to the address format used in scrletter and akletter. It includes a TeX file to print the addresses in different layouts.

anysize A simple package that can be used to set up the margins of a document. This package is obsolete. Use the package typearea to define your margins typographically. Use the geometry or vmargin package for everything else.

coordsys Provides commands for typesetting number lines (coordinate axes) and coordinate systems in the picture environment.

#### em in .../psnfssx

The PSNFSS support files for the "European Modern" (EM) fonts.

findhyph A Perl program to find all words hyphenated by TpX in a document.

## flshort in info/lshort/french

French translation of "The Not Short Introduction to LATEX  $2\varepsilon$ ".

## frenchpro in nonfree/languages/french Update to French Pro.

## ithyph in languages/hyphenation

Update of the hyphenation patterns for Italian.

jkthesis Just another LATEX document class for formatting your thesis.

## ${\tt lahyph \ in \ languages/hyphenation}$

Update of the hyphenation patterns for Latin.

## latexmk in support

Given the source files for a document, latexmk issues the appropriate sequence of commands to generate a .dvi, .ps, .pdf or hardcopy.

minutes Package for writing minutes of meetings.

## mxd in language/mongolian

Package for typesetting Xewtee Dorwoljin, a Mongolian script conceived in the 17th century.

## ocherokee in languages/cherokee

For typesetting the Cherokee language, including a PostScript version of the official Cherokee font.

pdfcprot A package to activate pdfTeX's character protruding feature.

pdftex\_for\_oztex in nonfree/systems/mac/pdftex pdfTEX for OzTEX is a shareware package. This update brings the pdfTEX programs to the 20010806 source code.

pictex2 An extension to standard PiCTEX.

preview A standalone L<sup>A</sup>TEX style to extract selected elements from a L<sup>A</sup>TEX source into separate pages of a DVI file.

## psfixbb in support

A program which sets or fixes the bounding box of a PostScript file, using Ghostscript, pnmfile and pnmcrop. This version handles files which have no showpage command, landscape files, and files produced on a Mac.

spie SPIE Proceedings format.

 ${\tt timetable} \ \ {\tt in} \ {\tt macros/plain/contrib/timetable}$ 

A TeX macro for generating timetables.

usergrps in usergrps

HTML pages for T<sub>F</sub>X usergroups.

#### December 2001

bold-extra in .../misc

Makes NFSS tables for the fonts/cm/mf-extra/bold fonts (bold cmtt and cmcsc).

bpchem docstrip-documented package for chemical typesetting.

## epstopdf in support

Converts EPS files to encapsulated PDF files for use with pdffATFX.

invoice For writing invoices. Supports English, German, Dutch and French.

keystroke For typesetting the graphical representation of the keys on a computer keyboard.

## latex2man in support

Translates UNIX manual pages written with LATEX into a format understood by the UNIX man(1) command. HTML, Texinfo, or LATEX code can be produced too.

#### LaTeX-Pack in support

Macros written in the NEdit scripting language to turn NEdit, the Nirvana text editor, into an advanced LATEX editor. NEdit version 5.2 or later is required.

mattens Vector, matrix and tensor symbols.

metre Provides classicists with some of the tools needed to typeset scholarly publications dealing with Greek and Latin texts; special emphasis on Greek verse.

#### parskip in .../misc

Simply changing \parskip and \parindent leaves a layout that is untidy; this package helps alleviate this untidiness.

## printlen in .../misc

Print LATEX lengths in a variety of units.

venn in graphics/metapost/contrib/macros Macros for Venn diagrams with METAPOST.

## January 2002

#### acroread\_new in support

(V.1.0) A Perl script to run Acroread under a different name, allowing several instances to be run independently.

### antt in fonts/psfonts/polish

Antykwa Toruńska, a traditional Polish typeface.

bahyph in language/basque Hyphenation patterns for the Basque language. Compatible with the support for Basque in Babel 3.7.

### cd in .../other

Print CD covers, featuring easy batch printing with crop marks, automatic track numbering and more.

#### cd-cover in .../other

Class for typesetting various forms of CD covers. V.1.4 adds automatic printing in landscape mode. Some minor documentation changes.

## ctie in web/c\_cpp

A CWEB-aware variant of TIE.

#### dk-bib in biblio/bibtex/contrib

A translation of the four standard BibTeX style files (abbrv, alpha, plain and unsrt) into Danish. From the Norwegian translation by Dag Langmyhr extended with ISBN and ISSN fields.

### epsfx.tex in macros/generic/TeX-PS

A TeX macro package for including EPS graphics.

eurosans (V.3.0) Supports scaling of the Adobe Euro symbol fonts.

### frhyph.tex in language/hyphenation

(V.2.11) Corrects the hyphenation of some words like cognitive, ignifuger, ignition, inexpugnable, etc.

gatech-thesis Georgia Institute of Technology theses.

LaTex\_WIDE in nonfree/systems/win32 A demonstration version (1.3) of an integrated editor and shell for TEX is free for noncommercial use, but without registration customization is disabled.

## makor in language/hebrew

Fonts and macros to typeset Hebrew in a natural manner with a software switch to turn vowels off or on, and examples.

nath Natural math notation, a style to separate presentation and content in mathematical typography. Delivers a particular context-dependent presentation on the basis of a rather coarse contextindependent notation—aims for producing traditional math typography.

polynom Implements macros for manipulating polynomials, for example it can typeset long polynomial divisions. V.0.14 adds a new style=C.

procIAGssymp Package for the preparation of a paper in the style of the proceeding of symposia sponsored by the International Association of Geodesy (IAG) published by Springer-Verlag.

## qfonts in fonts/psfonts/polish

A collection of fonts based on URW's clones in the QX encoding layout.

rectopma Allows the reuse of the main content of \title and \author anywhere in the document. Includes TestTitle.tex (combination manual/example of use).

### scientificviewer in nonfree/systems/win32

Scientific Viewer 4.0 is a free program for reading and printing (read-only) documents created with Scientific Notebook, Scientific Word or Scientific WorkPlace by MacKichan Software, Inc. Scientific Viewer can also be used to view many native LATEX documents.

## sihyph22.tex in language/slovene

Corrected Slovenian hyphenation patterns, as found on ftp://sizif.mf.uni-lj.si/pub/i18n/tex. Made by Matjaz Vrecko in 1990, maintained mostly by Leon Zlajpah in the '90s and uploaded on behalf of of Primoz Peterlin.

- srcltx Inserts source specials in .dvi files, enabling switching from a particular point in a previewer which supports them (e.g., Yap or xdvi-22.38) to the matching source in an editor which supports external direction to a specific point. Updated with a simpler implementation of input file tracking, using macro expansion instead of a stack. LATEX's \input{...} command is now overloaded as well.
- stack This class implements a stack mechanism without using TEX's stack, so that your stacks are not related to the TEX-grouping mechanism (useful for package developers). stack.dtx also defines a class relinput which implements a chdir-like mechanism so that \input can be done relative to the directory of any file.

## tables in macros/generic/tables

An easy T<sub>E</sub>X macro package for typesetting complex tables.

## vtex in systems

Release 7.530 of MicroPress's TEX for OS/2 and Linux (x86). Supports PDF security options and xpdf source specials.

## February 2002

#### AcroTeX in .../webeq

Formerly the Web/Exerquiz Packages, now bundled together as the "AcroTEX Education Bundle." A series of packages for the creation of dynamic and interactive education (or other) materials in PDF format. Includes a library of JavaScript functions.

## AlProTex.sty in web/protex

Minor modifications to this literate programming system, for compatibility with TeX4ht.

## bibtool in biblio/bibtex/utils

Manipulation of BibTEX files including: sorting and merging, pretty-printing, syntax checks with error recovery, semantic checks, generation of uniform reference keys, controlled rewriting with regular expressions, collection of statistics, and more. Includes documentation. C source only (no binary).

## cropbox.sty in .../ncctools

Crop marks with customizable parameters.

## cropmark.sty in .../ncctools

Produces a crop box around the page text area.

dcounter.dtx in .../ncctools

Dynamic counters.

## desclist.sty in .../ncctools

An improved description list environment.

## dcpic in macros/generic/diagrams

Macros for drawing Commutative Diagrams in a TFX (including LATFX and ConTFXt) document.

draftcopy Print the (translatable) word 'DRAFT' on selected pages.

### dvispell-dvistats in support

A Linux or MSDOS/djgpp version of dvispell (no longer limited to 8.3 file names). A comprehensive set of dictionaries is included.

- eqlist Allows description-like lists to have equal indentation. Requires eqparbox.
- esint Provides several alternate integral symbols (like \oiint) using the Computer Modern font.

## extdash.dtx in .../ncctools

Flexible hyphenation of compound words; can conform to Russian typesetting conventions.

- g-brief (V.3.0) A document class for LaTeX  $2\varepsilon$  for formless letters in German or English.
- guitar (A)TEX package for typesetting guitar chords over song texts. c.f. gchords.sty to typeset the chords graphically (not only by name). With references to other related packages. Requires toolbox.

## labels.sty in .../labels

Provides a new package option newdimens which allows more flexible specification of the label layout.

## latex4wp in info

A guide for word processor users designed to help convert knowledge and techniques of word processing into the LATEX environment.

## manyfoot.sty in .../ncctools

Adds footnote levels to the standard footnote mechanism includes an option for run-in paragraph footnotes (useful for critical editions).

## moresize in .../taupin

Provides three larger font sizes: 'giant', 'Giant' and 'GIANT'.

## nth.sty in .../generic

Ordinal numbering style: 1st 2nd 3rd 4th 5th,  $\dots$ 

## nccbbb.sty in .../ncctools

Implementation of poor Black Board Bold symbols. Not needed with contemporary LATEX systems.

## nccboxes.sty in .../ncctools

Adjustable boxes useful for setting tables.

## nccfancyhdr.sty in .../ncctools

New implementation of the functionality of the fancyhdr package for NCC-LMTEX.

## nccfoots.sty in .../ncctools

Commands for generating footnotes with manual marks. For example, the command to mark a footnote with an asterisk is \Footnote{\*} {text}.

### nccmath.sty in .../ncctools

Extension of the amsmath package to combine its typesetting of display equations with NCC-LATEX, especially for arrays.

## nccsect.sty in .../ncctools

Extension of LATEX's section, caption, and tocentries generation technique. Improvements include: simple declaring of sections of any level, user-controlled typeout, customizing of section or caption tag, simple declaring of toc-entries, \numberline command never overlaps the following text, automatic calculation of right margin in table of contents, different captions for different float types and simplified handling of new types of floats.

## nccthm.sty in .../ncctools

Extension to the **\newtheorem** command. Four properties of theorems are used: numbering mode, theorem type, indent style and break mode. Easy customization including spacing and commands inserted after headers.

#### osa.bst in biblio/bibtex/contrib

BibTeX style file for Optical Society of America (OSA) journals.

- rotfloat This package bridges the float and rotating packages, extending them with rotated versions of new floats.
- rotpages Allows pages to be rotated by 180 degrees and rearranged, so that they can be read by turning the printed copy upside-down.

## ${\tt smallcap} \ {\tt in} \ \dots / {\tt taupin}$

Make small caps a font family rather than a shape, thus allowing bold and slanted small caps.

smartref Expand capabilities of \label and \ref by adding commands similar to \pageref and other references to user-chosen counters. V.1.9 fixes a bug where equation labels were not used with AMS-IMTEX, and makes \smartref robust.

### TeX4ht in support

An enhanced version of a system for translating (P)TEX sources into hypertext. Annual upgrade.

#### tif2eps in support/pstools

A PostScript program for converting TIFF to EPS.

titling Provides control over the typesetting of the \maketitle command, and makes the \title, \author and \date information permanently available. New examples added to the documentation.

## tocenter.sty in .../ncctools

Provides commands \ToCenter and \FromMargins, which simplify the customization of page layout, either by specifying text element area dimensions, or by setting margins from the left, right, top, and bottom.

toolbox A package for (IA)TeX which provides some macros which are convenient for writing indices, glossaries, or other macros. V.4.2 keeps '#' in certain arguments unexpanded (as pointed out and solved by David Kastrup).

### txt2latex in support

Perl script to facilitate batch conversion of largely unformatted ASCII text for use with LATEX. Its sole purpose is to escape special characters and to fix single and double quotation marks.

## varsects.sty in taupin

Redefines \chapter, \section, \subsection etc. with optional parameters changing vertical space before and after the title, and the font size, series, shape or family.

## watermark.sty in .../ncctools

Provides watermarks, with options for left and right pages, temporary, **\thiswatermark** for current page only.

## webomints in fonts

Provides support files for the border and ornament font Web-O-Mints freely available from Galapagos Design. Created by George Ryan, Web-O-Mints contains a rich assortment of typographic decorations inspired by historical sources.

york-thesis A L<sup>A</sup>TEX  $2\varepsilon$  thesis class definition for York University (Toronto, Canada).

#### March 2002

## ama.bst in biblio/bibtex/contrib

A modification of the IEEE BibTEX style file to conform to the *American Medical Association Style Guide* guidelines for references. This is the style required by numerous biomedical journals (including JAMA, *Cancer*, NEJM).

#### bangtex in language

Font and class files for typesetting in Bangla (Bengali) and Assamese. Includes sample files, which and manual.

## biblio in support

(V.1.2) A perl program for preprocessing your bibliographic references. After preprocessing the input tex file it creates an output file with references included according to user-specified formatting.

## bmeps in support

A program to convert from PNG, TIFF, JPEG, NetPBM to EPS. V.1.0.2 fixes a bug related to malformed DSC comments.

### CWEBbin in web/c\_cpp

(V.3.64 [p20]) A set of change files (to be applied with TIE) that make the original sources usable with ANSI-C/C++ compilers on UNIX/Linux, MS Windows, and Amiga. Additional functionality, like macros, and macros for international documentation of CWEB programs, is introduced.

## dvpn in language/devanagari/contrib/fonts

PostScript Type 1 renderings of Frans Velthuis' Devanagari METAFONT fonts for T<sub>F</sub>X.

easy A collection of "easy" to use macros, including macros for writing tables, matrices, vectors, equations and custom bibliographies.

### emTeXTDS in systems/os2/emtex-contrib

(Fixpak 8) The emTEX/TDS distribution for OS/2, featuring the latest releases of  $\LaTeX$ ,  $\mathcal{A}_{\mathcal{M}}S$ - $\LaTeX$  and other packages, as well as several bug fixes.

#### eulervm in fonts

This is a set of *virtual* math fonts, based on Euler and CM. Included is a LATEX package, which makes them easy to use, particularly in conjunction with Type 1 PostScript text fonts. V.2.8 now works with sans serif text fonts.

#### icomma in .../was

An 'intelligent' comma, which yields proper spacing in decimal numbers as well as in mathematical expressions which does not depend on a specific encoding, and works with decimal numbers of arbitrary length. V.2.0 changes the behavior of the comma in math mode, so that the comma can be used both as a punctuation character and as a decimal separator.

## iTeXMac in systems/mac

All in one Cocoa application for  $T_EX$  on Mac OS X. javadvi in dviware

A dvi viewer and printer coded in Java. Needs Java RTE 1.3.

lettrine (V.1.2) Package designed to typeset various sorts of dropped capitals. Corrects a bug due to incorrect handling of rubber lengths; the bug occurred with seminar.cls for instance.

## ly1-min.zip in .../psnfssx/ly1

A minimum set of support files for using the LY1 encoding with LATEX. Fixes texnansi.enc, which had a wrong glyph name for the Euro symbol.

### mathdots.sty in generic

Provides the command \iddots for diagonal dots (slanting the opposite of \ddots). Also modifies the \ddots and \vdots so that they change size with LATEX's size changing commands and in suband superscripts.

- memoir Peter Wilson's flexible LATEX documentclass for typesetting of books such as novels, biographies, histories, etc., with options for trim marks, draft appearance, various sizes and much more. V.1.1 adds bug fixes, native support for subfigures, additional facilities for verse typesetting, experimental marginpar-like extensions, and a new edition of the user manual.
- ncclatex The NCC class and NCCLATEX package. It works together with NCCTOOLS, release 2.03 or later. Has many customization features and service commands making it more powerful than standard LATEX classes.
- newlfm For creating letters, faxes and memos; integrates the letter class with fancyhdr and geometry and includes support for an address database, languages, Avery labels and has full documentation.
- paralist This style file provides some new list environments. Itemized and enumerated lists can be

typeset within paragraphs, as paragraphs and in a compact version. Most environments have optional arguments to format the labels. Additionally, the LATEX environments itemize and enumerate can be extended to use a similar optional argument. V.2.3b fixes bugs in \setdefaultenum caused by changes made in V.2.3a (which provided improved documentation and bug fixes).

## s2latex-win32.exe in support/s2latex/win32

An MS-Windows (Win32) executable for s2latex, a utility which converts Scribe documents to LATEX.

- sffms For formatting science fiction and fantasy manuscripts in the format standard for the genre—12pt monospaced font with double spacing, etc. It is based on a previous style file called sfms. Full documentation is provided.
- snapshot Provides a snapshot of the external dependencies of a document insofar as they can be determined from inside LATEX. V.1.13 gives suitable warnings for files listed in an \RequireVersions statement or that do not appear in \@filelist, and adds a test option.

## texaide in support

A special version of Design Science's MathType Equation Editor that generates TEX and LATEX.

#### TeXmacs in systems/unix

(V.0.3.5.11) A text editor inspired by the popular T<sub>E</sub>X typesetting system and the Emacs editor. Runs on PCs under Linux and on Sun computers: "It is reasonable to expect that it will run on most UNIX/X-Windows systems in the near future."

texshade (V.1.6) For typesetting nucleotide and protein alignments in L<sup>A</sup>T<sub>F</sub>X.

## TrueTypeToType42 in fonts/utilities

Creates a PostScript Type 42 font file from a True-Type font file.

verse Aids in typesetting simple verse (poems). Update adds optional numbering, repeating patterns,
\\ as a linebreaking command and fixes \label
when used with the first line of a poem.

## webfiles in web

Improved documentation and code for PDF links.

## yhmath in fonts

Type 1 font for the yhmath package.

### April 2002

- captcont Retain a figure or table number across several float environments—usually over several pages. It also allows control over the contents of the List of Figures and the List of Tables pages.
- ccaption Provides: continuation captions, unnumbered captions and legends, captions outside float environments, bilingual captions, etc. It also enables the definition of new float environments and their captions. V.3.1a changes the subfigure option to support version 2.1.2 of the subfigure package.

### checkend.sty in .../bezos

Improves L $^{4}$ TeX's error messages for unclosed environments to make it easier to fix "\end occurred inside a group at level N."

- curve A class for making curriculum vitæ (in distinct versions). Provides commands to create rubrics, entries in these rubrics, etc. V.1.2. adds: more translations, a starred form for the \entry macro, with a simplified syntax, and most important, support for standard bibliography inclusion.
- datetime Changes format of \today. Provides commands for current time (12 or 24 hour forms), printing ordinal number forms (e.g., 3rd), and as a string (e.g., \numberstring{3} would print three).
- dtk (V.1.6) Document class and style for *Die TEXnische Komoedie*, the communications of Dante e.V., the German speaking TEX users' group.

## feyn in fonts

Can produce relatively simple Feynman diagrams within equations or text in a LATEX document.

- figsize Dynamic and automatic sizing of graphics and other elements relative to page.
- fixme Provides insertion of "fixme" notes in draft documents, either in the margin of the document, as index entries, in the log file and/or as warnings on stdout or to summarize them in a list. Has support for AUC-TeX. V.2.0 has many new features, including: a new layout option (inline), notes counters, a usage summary at the end of processing, more translations, and most important, three additional macros for including non-critical notes of different importance levels.
- gauss Package for type setting matrix operations, now compatible with  $\mathcal{A}_{\mathcal{M}}\mathcal{S}\text{-}\mathrm{TFX}$ .
- gloss Allows creation of glossaries via BibTeX.
- jurabib Supports various forms of short and long citations; now does Oxford-style formatting and includes support for Spanish. Many other changes and improvements.

#### kerkis in fonts/greek

The first freely available Type 1 font to fully support Greek (polytonic included) through Babel. An extension of the Bookman Old Style design. Also supports the Latin alphabet very well, with support for OT1 and T1 encodings as well as many missing ligatures and true small caps.

lettre (V.2.345) Designed to write letters with LATEX in French, German, English. The letter aspect is entirely configurable, through a number of dimensions and macros, that can be put also in a so-called "institute package" called at initialization. Includes documentation and examples in all three languages.

## mathabx in fonts

Large series of mathematical symbols. Initial release, "merely for evaluation".

msc Draws Message Sequence Charts. Version 1.10 is a major update since the previous version, supporting the ITU standard MSC2000.

## oztex in nonfree/systems/mac

V.5 of a shareware implementation of TEX and associated programs for Apple Macintosh systems.

- pdfpages Package to enable the inclusion of pages of external PDF documents. V.0.2d adds a fitpaper option; V.0.2g the option addtotoc which adds entries to the Table of Contents (e.g., for putting together conference proceedings).
- plates Configurable float environment that is gathered to end of the document for special printing (e.g., plates, photos, color diagrams)
- preview-latex A system for displaying inline images of selected parts of a file in Emacs source buffers. The style file is independently useful for extraction of selected text elements as images.

protocol Typeset meeting protocols (in German).

#### purifyeps in support

Makes .eps files work with both dvips and pdflatex by converting PostScript code into the "stylized format that METAPOST outputs."

- rcsinfo Use RCS (Revision Control System) information in a LATEX document. For LATEX2HTML users, rcsinfo.perl adds the functionality to that tool. With V.1.9, the initial \\$ of \\$Id may be omitted.
- shorttoc Adds the macro \anothertableofcontents (or \anothertoc) to import and display the table of contents of another document. It can also import and display the list of figures (or similar things) from another document.
- showlabels Puts the names of \labels (or other macro arguments) into the margins of a draft document.

  V.1.4 adds an [inline] option and is more compatible with wrapfig.

## skull in fonts

METAFONT version of a skull-and-crossbones symbol, with IATEX bindings.

- songbook (V.4.0) An all-purpose songbook style. Allows for three types of output from a single input file: words and chords books for musicians to play from, words-only songbooks for a congregation to sing from, and overhead transparency masters. Will also print a table of contents, an index sorted by title and first line, and an index sorted by key. It attempts to handle songs in multiple keys, as well as songs in multiple languages.
- subfigure Package for providing support for the inclusion of small, 'sub', figures and tables. It simplifies the positioning, captioning and labeling of them within a single figure or table environment. In addition, this package allows such subcaptions to be written to the List of Figures or List of Tables if desired. V.2.1.3 fixes an incompatibility with several packages including the tocloft and the ccaption packages when used with the hyperref package and 2.1 includes bug fixes, second optional argument to allow control over the list-of-figures entry separately from the subcaption, a tight option for a

more compact arrangement, a \subref command to allow references to the subfigure, new raggedright option for the subcaption, and font formatting options only affect the label portion of the subcaption.

textpos Places boxes (containing text, or graphics, or a table, etc.) at absolute positions on the page. V.1.2 adds [verbose] and [quiet] options.

textopo Plots topology data of membrane proteins derived from PHD predictions, SwissProt database files, or manually entered data; and transmembrane domains as seen from above or beneath the cell membrane. Fully compatible with TeXshade—this allows calculated shading based on sequence conservation and functional aspects of the residue sidechains. V.1.3 introduces two more helical wheel styles and the indication of the hydrophobic moment. Further, the dvips driver is not mandatory anymore as is rotating.sty.

titlesec Essentially a replacement — partial or total — for the LATEX macros related to sections; namely, titles, headers, and contents (upgrade to V.2.5). Now calc-savvy, shorthand in lengths now accepts non-integer numbers and the unit is not hardcoded, more meaningful error messages, bug fixes.

tocbibind A package to add document elements like a bibliography or an index to the Table of Contents. The "List of ..." headings can also be put into the ToC. V.1.5c fixes a problem with \tocchapter in non-chaptered documents and a problem with \tocetcmark.

## urlbst in biblio/bibtex/contrib

Perl script to adds a 'webpage' entry type, and support for general 'url' and 'lastchecked' fields, to arbitrary BibTeX style files.

## WinShell in systems/win32

(V.2.2) A graphical user interface for easily working with TEX. It is *not* a TEX system so requires a system such as MikTEX or TEX Live.

#### wp2latex in support

Conversion from Wordperfect 6–8 into LATEX. Update adds many new features: support for style epsfig.sty, fixed problem with filenames, working RTF parser, small attempt to do handle raster images, Windows GUI, ability to read WP3.x Macintosh files, etc.

## May 2002

## BSR2dvi in dviware

Alpha release. Utility for extraction of a standard .dvi file from Textures' "all-in-one" file format.

#### cases.sty in .../other/misc

(V.2.5) Fixes formatting of over-full displays.

## cmbright in fonts

Updates the CM Bright typefaces to V1.1.0g; corrects the fonts metrics of the text companion fonts, and improved documentation of the macro package. License changed to LPPL making possible the creation of "scalable vectorized versions...including Adobe Type 1."

#### catdvi in dviware

The program is a .dvi-to-plain text translator capable of generating ASCII, Latin-1 and UTF-8 (Unicode) output. It aims to become a superior replacement for the dvi2tty utility. The current version is quite usable for previewing (on character-cell displays) .dvi files that contain mostly linear text. V.0.13 adds new or improved TEX font encodings, European currency symbol support, improved math layout, usability enhancements and fixes.

crop The package provides different forms of cropmarks for trimming paper stacks, for camera alignment, and for visualizing the page dimensions, as well as options for reflecting and inverting the whole document. V.1.7 adds new options, the ability to set paper dimensions explicitly, and to suppress marks when printing duplex and improved compatibility.

cite Sync with TEX Live; improve babel support.

### dtxtut in info

"How to Package Your LATEX Package"—a tutorial for advanced LATEX  $2\varepsilon$  users who want to learn how to create .dtx and .ins files for distributing their homebrewed classes and style files.

#### euro-ce in fonts

(V.3.0) METAFONT source of the official Euro currency symbol and CE logo including variants, in both solid and outline.

## eurosym in fonts

METAFONT source for the official Euro currency symbol and CE logo including variants, in both solid and outline with a LATEX style to access it. V.1.3 adds Type 1 fonts generated by textrace and modified by pfaedit.

## fontinst-prerelease in fonts/utilities

Update for the font installation package which includes up-to-date 8y.etx and 8r.etx files, with the Euro symbol.

gradback A small addition to pstricks to generate gradient backgrounds.

jasthesis Conforms to thesis requirements of the University of Bristol, UK. It also approximates the BS4821:1990 standard.

## logfilter in nonfree/support

A Java program that monitors the logfiles produced during a typesetting run and presents them in an interactive environment with the option when encountering an error in a file to open that file in an editor at the proper point in the file.

### lshort in info/lshort/slovak

A translation of lshort (The Not So Short Introduction to  $\LaTeX$  2 $\varepsilon$ ) into Slovak.

manuscript Package for recreating the appearance of a typewritten (monospaced with double linespacing) article manuscript.

## mathpazo in fonts

Package (fonts and LATEX style file) for mathematical typesetting with the Palatino fonts. V.1.003 for

use with version 9 of PSNFSS; also fills out Math Blackboard Bold, re-designed \Phi, \varsigma, \xi and \zeta.

# mn2eguide in nonfree/macros/latex/contrib/mnras A guide for authors who are preparing papers for Monthly Notices of the Royal Astronomical Society

(MNRAS), together with a sample article. multicap Formatting captions inside multicols.

mwcls Standard L<sup>A</sup>TEX classes, tailored to Polish printing customs.

ntheorem (V.1.203) Extensions for handling theoremlike environments.

## piechartMP in graphics/metapost/macros

Enables even users with not much experience to draw their pie-charts with MetaPost. It supports basic 2D pie-charts as well pie-charts in 3D projection. The chief purpose for the piechartMP development was the support for presentations. The user can make segments invisible or hide a segment completely, in order to draw multiple different charts from one data-set.

platex (V.1.2.3) A set of tools for typesetting in Polish. Some of its general purpose macros are used in other packages hence the present location (with a link from the old languages/polish/platex).

## proof in support

A Bash (Bourne Again Shell) based complement to an ordinary word processing program, able to coordinate the processing and viewing of TeX, LATeX, METAFONT and METAPOST-sources.

## psnfss in macros/latex/required

Version 9 of the PSNFSS system, supporting the use of the base 35 PostScript fonts and the Charter, Utopia and Pazo fonts with LATEX. The TeXBase1 encoding now includes the Euro symbol, \hbar in mathptmx.sty improved, missing scriptratio redefinitions added. Documentation updated.

### psnfss-source in fonts/psfonts

Sources of the latest PSNFSS version 9.

soul Provides flexible, hyphenatable letterspacing, underlining, overstriking, and highlighting. Now allows natural input syntax for accents, dashes etc., font switching commands in the argument, bug fixes, provides some additional features: highlighting, \sloppyword, improved documentation and programming interface. V.2.3 allows natural input syntax for accents, dashes etc., font switching commands in the argument, bug fixes, provides some additional features: highlighting, \sloppyword, improved documentation and programming interface. Compatible with ccfonts.sty, beton.sty, and cmbright.sty.

## ${\tt SQLTeX}$ in support

A well documented Perl preprocessor to enable the use of SQL statements in LATEX. V.1.4 adds an option to replace values in the database results using configurable replace files.

swimgraph Produces color graphs of a swimmer's performances, from data recorded in a text file, specified by arguments for the desired date range. Records and qualifying times may be included.

### ttf2tex in support

Bash script to create all files necessary to use True-Type fonts with teTEX. V.0.5 has preliminary support for OpenType fonts (TT based only), support for real small caps, oldstyle figures, support for -n and -N switches of ttf2tfm, an option to disable hyphenation, more robust and flexible and an updated and extended manual, and more.

ziffer Formats numbers according to the conventions used in Germany and some other countries (even in math mode). Update adds a switch to disable conversion of -- for compatibility with newer versions of amsmath.

### June 2002

#### astro in fonts

(V.2.00) METAFONT source for astronomical and astrological symbols: planets, signs of the Zodiac, and others, all with variant shapes, in three styles, plus six symbols for the phases of the moon.

#### bakoma in systems/win32

Upgrade of BaKoMa TEX system to V.4.60.

#### CJK in language/chinese

(V.4.5.1) LATEX support for Asian scripts: Chinese (both traditional and simplified), Japanese, Korean and Thai, in many encodings (including Unicode). Adds support for BG5+ and GBK character sets, Thai support for Babel, multifile documents, and much more.

## ctable in biblio/bibtex/contrib

Provides commands to easily typeset centered table and (multiple-)figure floats, with footnotes.

## decsci.bst in biblio/bibtex/contrib

Style for the journal *Decision Sciences* for use with the natbib package (author-year format citations).

#### EPIX in graphics

Command-driven (non-GUI) preprocessor for creating flexible, mathematically accurate line figures containing mathematical typography. Should run on any UNIX-like operating system; a C++ compiler and GNU Bash are required.

koma-script Reimplementation of the LATEX classes (article, report, book, letter), "implementing European rules of typography and paper formats as documented in Tschichold (Selected Papers on Book Design and Typography). New version includes a completely rewritten letter class (scrlttr2), enhanced control over captions, support for date and time in Dutch and Croatian, and new developer interface for styling text elements.

layouts Enables display of various elements of a document's layout including: the general page layout; disposition of floats; layouts of paragraphs, lists, footnotes, table of contents, and sectional headings; font boxes. Facilities are provided for document designers to experiment with the layout parameters. V.2.6 adds expanded page layout options.

memoir Peter Wilson's flexible LATEX documentclass for typesetting of books such as novels, biographies, histories, etc., with options for trim marks, draft appearance, various sizes and much more. V.1.1 adds bug fixes, native support for subfigures, additional facilities for verse typesetting, experimental marginpar-like extensions, and a new edition of the user manual.

#### mpp in web/noweb/kostas

A multilingual pretty-printer for noweb.

newfile Provides convenient user level commands for reading and writing new files during a LATEX run.

### oletex in systems/win32

Allows embedding of pictures and other OLE objects into LATEX.

#### placeins.sty in .../misc

(V.2.0) Now prevents floats from floating up past a **\FloatBarrier**, with an option to restore the original behavior.

poemscol Numbers lines of verse, makes separate endnote sections for emendations, collations, and explanatory notes, with notes tied to the line numbers, marks cases where stanza breaks fall on page breaks. Provides most of the features necessary for a critical edition of a poet's works, such as described by the MLA Committee on Scholarly Editions.

## skak in fonts

Package for typesetting chess. V.1.0 has bug fixes and updated documentation: a short user guide, an example and a reference manual listing all available commands and the package options.

subfiles Allows individual typesetting of files that are \input and of the main file without making any changes to them.

#### thumbpdf in support

The package provides support for thumbnails with pdfTEX, and plain/IFTEX formats. Requirements: Perl5, Ghostscript, pdfTEX. V.3.0 adds: support for ghostscript anti-alias parameters, VTEX's PostScript mode, option --greek for Greek style mode and signal handlers added for cleanup.

tocloft Provides control over the typography of the Table of Contents, List of Figures, List of Tables and user defined "List of ..." lists. Version 2.3 is compatible with the koma classes and adds control over the page style.

## uk-tex-faq in help

Updated version also available via the Web at http://www.tex.ac.uk/faq. Includes a new answer from David Kastrup summarizing recent work on the TEX document preparation environment.

#### xmltex in macros

xmltex is a system for typesetting XML files with

TEX. It may be used on its own or in conjunction with another TEX format (IATEX is assumed for most examples). Update to sync with the enhanced version bundled with passive TEX.

- ♦ Mark LaPlante
   109 Turnbrook Drive
   Huntsville, AL 35824
   laplante@mac.com
- ♦ William F. Adams
   75 Utley Drive, Ste. 110
   Mechanicsburg, PA 17055
   willadams@aol.com