The Treasure Chest

This is a selection of the new packages posted to CTAN (`ctan.org`) from October 2018–April 2019, with descriptions based on the announcements and edited for extreme brevity.

Entries are listed alphabetically within CTAN directories. More information about any package can be found at `ctan.org/pkg/`*pkgname*. A few entries which the editors subjectively believe 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. See also `ctan.org/topic`. Comments are welcome, as always.

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biblio

alpha-persian in `biblio/bibtex/contrib`
Persian version of `alpha.bst`, using X∃TeX.
econ-bst in `biblio/bibtex/contrib`
Customizable BibTeX style for economics papers.
zootaxa-bst in `biblio/bibtex/contrib`
BibTeX style for the journal *Zootaxa*.

fonts

crimsonpro in `fonts`
Eight weights and italics for each weight.
cuprum in `fonts`
Cuprum font family support for LaTeX.
garamond-math in `fonts`
OpenType math font matching EB Garamond.
inriafonts in `fonts`
Inria fonts with LaTeX support.

graphics

chordbars in `graphics/pgf/contrib`
Chord grids for pop/jazz tunes in TikZ.
chordbox in `graphics/pgf/contrib`
Draw chord diagrams in TikZ.
euflag in `graphics`
Flag of European Union using standard packages.
fiziko in `graphics/metapost/contrib/macros`
MetaPost library for physics textbook illustrations.
memorygraphs in `graphics/pgf/contrib`
Typeset graphs of program memory in TikZ.
ptolemaicastronomy in `graphics/pgf/contrib`
Diagrams of sphere models for variably strict conditionals (Lewis counterfactuals).

pst-moire in `graphics/pstricks/contrib`
Moiré patterns in PSTricks.
pst-venn in `graphics/pstricks/contrib`
Venn diagrams in PSTricks.
tikz-imagelabels in `graphics/pgf/contrib`
Put labels on existing images using TikZ.
tikz-truchet in `graphics/pgf/contrib`
Draw Truchet tiles in TikZ.
tikzlings in `graphics/pgf/contrib`
Cute little animals and similar creatures in TikZ.

indexing

∗xindex in `indexing`
Unicode-compatible index generation (in Lua).

info

∗joy-of-tex in `info`
Text of Michael Spivak's *Joy of TeX*, for the AMS-TeX format.
latex4musicians in `info`
Guide for combining LaTeX and music.
texonly in `info`
Sample document in plain TeX.

language/thai

zhlineskip in `language/chinese`
Line spacing for CJK documents.

language/japanese

bxjaholiday in `language/japanese`
Support for Japanese holidays.
pxjodel in `language/japanese`
Help change metrics of fonts from `japanese-otf`.

macros/generic

poormanlog in `macros/generic`
Standalone package for logarithms and powers, with almost 9 digits of precision.

macros/latex/contrib

armymemo in `macros/latex/contrib`
Class for Army memorandums, following AR 25-50.
asmeconf in `macros/latex/contrib`
Template for ASME conference papers.
brandeis-problemset in `macros/latex/contrib`
Class for COSI problem sets at Brandeis University.
bussproofs-extra in `macros/latex/contrib`
Extra commands for `bussproofs.sty`.
changelog in `macros/latex/contrib`
Changelog environment; supports multiple authors, unreleased changes, revoked releases, etc.
commedit in `macros/latex/contrib`
Commented (teacher/student) editions.

elegantbook in `macros/latex/contrib`
"Elegant" (Chinese) template for books.

elegantnote in `macros/latex/contrib`
"Elegant" (Chinese) template for notes.

elegantpaper in `macros/latex/contrib`
"Elegant" (Chinese) template for economics papers.

els-cas-templates in `macros/latex/contrib`
Typeset articles for Elsevier's Complex Article Service (CAS) workflow.

eqexpl in `macros/latex/contrib`
Align explanations for formulas.

exam-randomizechoices in `macros/latex/contrib`
Random order of choices, under the `exam` class.

exercisepoints in `macros/latex/contrib`
Count and score exercises.

exframe in `macros/latex/contrib`
Framework for exercise problems.

fascicules in `macros/latex/contrib`
Create mathematical manuals for schools.

fbox in `macros/latex/contrib`
Extended `\fbox` macro from standard LaTeX.

frenchmath in `macros/latex/contrib`
Typesetting mathematics with French rules.

ftc-notebook in `macros/latex/contrib`
Typeset FIRST Tech Challenge notebooks.

gammas in `macros/latex/contrib`
Template for the GAMM Archive for Students.

gitver in `macros/latex/contrib`
Typeset current git hash of a document.

globalvals in `macros/latex/contrib`
Declare global variables that can be used anywhere, including before their declaration.

glossaries-estonian in `macros/latex/contrib`
Estonian translations for the `glossaries` package.

icon-appr in `macros/latex/contrib`
Create icon appearances for form buttons.

invoice-class in `macros/latex/contrib`
Make a standard US invoice from a CSV file.

iodhbwm in `macros/latex/contrib`
Unofficial template of the DHBW Mannheim.

identkey in `macros/latex/contrib`
Bracketed dichotomous identification keys.

keyindex in `macros/latex/contrib`
Index entry by key lookup, e.g., for names.

latex-uni8 in `macros/latex/contrib`
Generic `inputenc`, `fontenc`, and `babel` for pdfLaTeX and LuaLaTeX.

latexalpha2 in `macros/latex/contrib`
Embed Mathematica code and plots into LaTeX.

latexcolors in `macros/latex/contrib`
Color definitions from `latexcolors.com`.

lectures in `macros/latex/contrib`
Support for typesetting lecture notes.

lstfiracode in `macros/latex/contrib`
Use the Fira Code font for listings.

ltxguidex in `macros/latex/contrib`
Extended `ltxguide` class.

* metalogox in `macros/latex/contrib`
Adjust TeX logos, with font detection.

mi-solns in `macros/latex/contrib`
Extract solutions from exercises and quizzes.

mismath in `macros/latex/contrib`
Mathematical macros for ISO rules.

modeles-factures-belges-assocs in `m/l/c`
Make invoices for Belgian non-profit organizations.

multicolrule in `macros/latex/contrib`
Decorative rules between columns.

njurepo in `macros/latex/contrib`
Report template for Nanjing University.

qsharp in `macros/latex/contrib`
Syntax highlighting for Q# language.

realhats in `macros/latex/contrib`
Replace math hat ($\hat{u}$) symbols with pictures of actual hats.

rgltxdoc in `macros/latex/contrib`
Common macros for documentation of the author's packages.

rulerbox in `macros/latex/contrib`
Draw rulers around a box.

ryersonsgsthesis in `macros/latex/contrib`
Thesis template for the Ryerson School of Graduate Studies (SGS).

scratch3 in `macros/latex/contrib`
Draw Scratch programs with LaTeX.

tablvar in `macros/latex/contrib`
Tables of signs and variations per French usage.

topiclongtable in `macros/latex/contrib`
Extend `longtable` with cells that merge hierarchically.

ucalgmthesis in `macros/latex/contrib`
Thesis class for University of Calgary Faculty of Graduate Studies.

xcpdftips in `macros/latex/contrib`
Extend `natbib` citations with PDF tooltips.

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macros/latex/contrib/beamer-contrib/themes

beamerauxtheme in `m/l/c/b-c/themes`
Supplementary outer and inner themes for beamer.

beamertheme-light in `m/l/c/b-c/themes`
Minimal beamer theme.

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macros/latex/contrib/biblatex-contrib

icite in `m/l/c/biblatex-contrib`
Indices locorum citatorum: indexes of authors and works, generated from a bibliography.

windycity in `m/l/c/biblatex-contrib`
A Chicago style for BibLaTeX.

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macros/luatex/latex

beamer-rl in `macros/luatex/latex`
Right-to-left presentation with `beamer` and `babel`.

luaimageembed in `macros/luatex/latex`
Embed images as base64-encoded strings.

luarandom in `macros/luatex/latex`
Create lists of random numbers.

`makecookbook` in `macros/luatex/latex`
> Support cookbook typesetting.

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macros/xetex/latex

`quran-de` in `macros/xetex/latex`
> German translations for the `quran` package.

`technion-thesis-template` in `macros/xetex/latex`
> Thesis template for the Technion graduate school.

`tetragonos` in `macros/xetex/latex`
> Macro mapping for Chinese characters for the
> four-corner method.

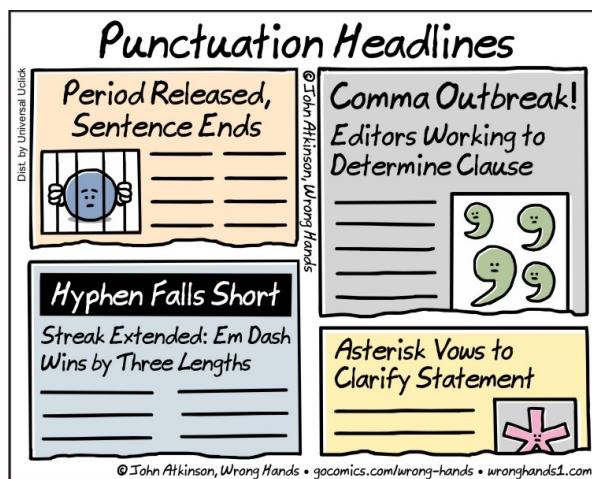### macros/xetex/plain

`do-it-yourself-tex` in `macros/xetex/plain`
> Modifiable forms, macros, samples for plain X$_\exists$T$_E$X.

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support

`pdftex-quiet` in `support`
> Filter and colorize `pdftex` terminal output.

`pkgcheck` in `support`
> CTAN package checker.

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systems/unix

`tex-fpc` in `systems/unix`
> Change files for the Free Pascal compiler.

Comic by John Atkinson (`https://wronghands1.com`).