



The Treasure Chest

This is a selection of the new packages posted to CTAN (ctan.org) from October 2017–April 2018, 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

`gbt7714` in `biblio/bibtex/contrib`
Support for the Chinese bibliography standard GB/T 7714-2015.

fonts

`cmsrb` in `fonts`
Computer Modern for Serbian and Macedonian.

`fontawesome5` in `fonts`
Support for Font Awesome 5.

* `gfsneohellenicmath` in `fonts`
Hellenic-style math font supporting many languages.

`morisawa` in `fonts`
Selection of five standard Japanese fonts for \pLaTeX with `dvips`.

* `plex` in `fonts`
 \TeX support for the IBM Plex typeface family.

`plex-otf` in `fonts`
(`Lua`, `Xq`) \TeX support for Plex as system fonts.

* `stix2-otf` in `fonts`
OpenType Unicode STIX Two fonts.

* `stix2-type1` in `fonts`
STIX Two in Type 1 format.

graphics

`adigraph` in `graphics/pgf/contrib`
Augmenting directed graphs.

`graph35` in `graphics`
Draw keys and screen items of Casio calculators.

`pgfornament-han` in `graphics/pgf/contrib`
Traditional Chinese motifs and patterns for PGF.

`graphics/pixelart`

`pixelart` in `graphics`
`TikZ` package for single-color pixel-art pictures.

`pst-antiprism` in `graphics/pstricks/contrib`
An antiprism in `PSTricks`.

* `pst-calculate` in `graphics/pstricks/contrib`
Floating point support in \LaTeX , using `expl3`.

`pst-dart` in `graphics/pstricks/contrib`
Dart boards with `PSTricks`.

`structmech` in `graphics/pgf/contrib`
`TikZ` support for structural mechanics drawings.

`tikz-feynhand` in `graphics/pgf/contrib`
Feynman diagrams with `TikZ`.

`tikz-karnaugh` in `graphics/pgf/contrib`
PGF package for Karnaugh maps supporting many variables.

`tikz-ladder` in `graphics/pgf/contrib`
Ladder diagrams for the PLC LD language.

`tikz-layers` in `graphics/pgf/contrib`
Provide more graphics layers for `TikZ`.

`tikz-relay` in `graphics/pgf/contrib`
Electrical diagrams with `TikZ`.

`tikz-sfc` in `graphics/pgf/contrib`
Symbol collection for PLC programming sequential function chart (SFC) diagrams in `TikZ`.

info

`guide-latex-fr` in `info`
Introduction to \LaTeX written in French.

`latex-via-exemplos` in `info`
 \LaTeX course written in Brazilian Portuguese.

* `short-math-guide` in `info`
Guide to using `amsmath` and related packages.

language/thai

`thaispec` in `language/thai`
Thai-language typesetting in \XeLaTeX .

macros/latex/contrib

`ascmac` in `macros/latex/contrib`
Box and picture macros with Japanese vertical writing support.

`authorarchive` in `macros/latex/contrib`
Add self-archiving information to scientific papers.

`auto-pst-pdf-lua` in `macros/latex/contrib`
Using \LuaTeX together with PostScript code.

`bxtexlogo` in `macros/latex/contrib`
Additional \TeX -family logos and abbreviations.

`cascade` in `macros/latex/contrib`
Brace constructions for math demonstrations.

`chemsec` in `macros/latex/contrib`
Automated creation of numeric entity labels.

`colophon` in `macros/latex/contrib`
Produce a colophon.

`crossreftools` in `macros/latex/contrib`
Expandable extraction of `cleveref` data.

`duckuments` in `macros/latex/contrib`
Create duckified dummy content.

- `eqnnumwarn` in `macros/latex/contrib`
Warn about displaced equation numbers.
- `exercisebank` in `macros/latex/contrib`
Creating, managing, reusing exercises.
- `fancyhandout` in `macros/latex/contrib`
Produce nice-looking handouts.
- `fduthesis` in `macros/latex/contrib`
Thesis template for Fudan University.
- `footnotehyper` in `macros/latex/contrib`
Partial `hyperref` support for the `footnote` package.
- `gentombow` in `macros/latex/contrib`
Generate Japanese-style crop marks.
- `graphicxpsd` in `macros/latex/contrib`
Adobe Photoshop Data (PSD) support for `graphicx`.
- `gridslides` in `macros/latex/contrib`
Free form slides with blocks placed on a grid.
- `handin` in `macros/latex/contrib`
Lightweight template for problem sets.
- `hectheses` in `macros/latex/contrib`
Thesis class for HEC Montréal.
- `hulipsum` in `macros/latex/contrib`
Hungarian dummy text.
- `intopdf` in `macros/latex/contrib`
Embed non-PDF files in PDF with hyperlinks.
- `isopt` in `macros/latex/contrib`
Print dimension with user-defined space between number and unit.
- `jkmath` in `macros/latex/contrib`
Semantic markup macros for math.
- `labelschanged` in `macros/latex/contrib`
Find labels causing endless “may have changed” warnings.
- `lccaps` in `macros/latex/contrib`
Lowercased (spaced) small capitals.
- `llncsconf` in `macros/latex/contrib`
Extending the Springer `llncs` class.
- `mathfam256` in `macros/latex/contrib`
256 math families for (u)pL^AT_EX and Lamed.
- `mathfixs` in `macros/latex/contrib`
Spacing for fractions and roots, bold symbols, etc.
- `modernposter` in `macros/latex/contrib`
Modern L^AT_EX poster class
- `nicematrix` in `macros/latex/contrib`
Matrices with continuous dotted lines.
- `nidanfloat` in `macros/latex/contrib`
Support for [b] placement for full-width float in double-column mode.
- `outlining` in `macros/latex/contrib`
Create outlines for scientific documents.
- `pdfprivacy` in `macros/latex/contrib`
Suppressing PDF metadata.
- `polexpr` in `macros/latex/contrib`
Parser for polynomial expressions.
- `scientific-thesis-cover` in `macros/latex/contrib`
Generic support for cover pages and affirmations.
- `sectionbreak` in `macros/latex/contrib`
Support for thought breaks.
- `simpleinvoice` in `macros/latex/contrib`
Easy typesetting of invoices.
- `statmath` in `macros/latex/contrib`
Simple use of statistical notation.
- `stealcaps` in `macros/latex/contrib`
Borrow small capitals from another font.
- `textualicomma` in `macros/latex/contrib`
Using the text ‘;’ as decimal separator in math.
- `thesis-gwu` in `macros/latex/contrib`
Thesis class for George Washington University School of Engineering and Applied Science.
- `timbreicmc` in `macros/latex/contrib`
Include watermarks for ICMC/USP (Brazil).
- `translator` in `macros/latex/contrib`
Easy translation of strings.
- `unitn-bimrep` in `macros/latex/contrib`
Class for the bimonthly PhD engineering report at Università di Trento.
- `univie-ling` in `macros/latex/contrib`
Class for the applied linguistics department at Vienna University.
- `xtuthesis` in `macros/latex/contrib`
XTU (China) thesis template.
- `xurl` in `macros/latex/contrib`
Allow url break at any alphanumeric character.
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- macros/latex/contrib/beamer-contrib/themes**
- `beamertheme-saintpetersburg` in `m/l/c/b-c/themes`
Support for Saint Petersburg State University.
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- macros/latex/contrib/biblatex-contrib**
- `biblatex-ext` in `m/l/c/biblatex-contrib`
Extended BIBL^AT_EX standard styles.
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- macros/luatex/latex**
- `bezierplot` in `macros/luatex/latex`
Approximate smooth function graphs with splines.
- `gurps` in `macros/luatex/latex`
Generic Universal Role Playing System materials.
- `plantuml` in `macros/luatex/latex`
Rendering diagrams specified in PlantUML.
- `typewriter` in `macros/luatex/latex`
Typeset with randomly variable monospace font.
- `walcalendar` in `macros/luatex/latex`
Wall calendar class with custom layouts and internationalization.
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- macros/xetex/latex**
- `sexam` in `macros/xetex/latex`
Support for Arabic `exam` scripts.
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- support**
- `ctan-o-mat` in `support`
Upload or validate a package for CTAN.
- `lyluatex` in `support`
Include LilyPond scores in a LuaL^AT_EX document.
- `npp-for-context` in `support`
ConT_EXt plugin for Notepad++.