

The [LaTeX3 News Issue 8](#) has been released today. Some of the topics are support for floating point calculations and regular expressions.

- **Extended floating point support:** Thanks to Bruno Le Floch, who has been re-writing the floating point module, floating point calculations can be computed far more flexibly and efficiently than before. Now they work in an "expandable" manner. While you could do such calculations using Lua in LuaTeX, it's now also possible with pdfLaTeX and XeLaTeX.
- **Regular expressions:** Bruno has written a complete regular expression engine. That's very valuable for search & replace jobs and for text manipulation in general. While regexps are well supported by standard tools on Linux/Unix systems, there's no such direct support in Windows - now you can use LaTeX for this.
- **Separating internal and external code:** LaTeX3 clearly separates public interfaces and private functions and variables. It's implemented by a naming convention, and some support mechanisms.
- **Naming convention for internals:** While normal functions which are intended for external use begin just with the usual backslash, internal commands are prefixed with a double underscore, right after the backslash, in the expl3 language. As this might become inconvenient, l3docstrip adds LaTeX3 extensions to the DocStrip program, introducing a "shorthand" for internal package prefixes: @@ would be expanded to the function prefix when the .sty file is extracted. So function names are shorter, thus easier to type. Furthermore, the code source clearly shows which commands are intended to be used externally.