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Les Cahiers GUTenberg is the journal of GUT, the French-language T_EX user group (<http://www.gutenberg.eu.org>).

PAUL ISAMBERT, LuaT_EX: vue d'ensemble [LuaT_EX: An overview]; pp. 3–12

MANUEL PÉGOURIÉ-GONNARD, Un guide pour LuaL^AT_EX [A guide to LuaL^AT_EX]; pp. 13–35

This document is a map, or tourist guide, for the new world of LuaL^AT_EX. The intended audience ranges from complete newcomers (with a working knowledge of conventional L^AT_EX) to package developers. This guide is intended to be comprehensive in the following sense: it contains pointers to all relevant sources, gathers information that is otherwise scattered, and adds introductory material.

MAXIME CHUPIN, LuaL^AT_EX pour les non-sorciers, deux exemples [LuaL^AT_EX for non-wizards, two examples]; pp. 37–56

This article presents a way to use LuaT_EX without being an expert in T_EX or Lua. The examples illustrate the treatment of external files by Lua, and the use of Lua in order to perform some computations hardly implementable in T_EX. These examples are the generation of L^AT_EX tabular code from an external data file and the implementation of the method of least squares and its graphical presentation.

MANUEL PÉGOURIÉ-GONNARD, Attributs et couleurs [Attributes and colors]; pp. 57–85

This article presents a new tool provided by LuaT_EX to extend T_EX: attributes, and how they can be used to implement colors. First, we study the general concept of attributes and the T_EX and Lua interfaces. Then, we recall the main points of the classical color implementation in L^AT_EX and its well-known limitations. Finally, a solution to these problems, using attributes, is presented, and demonstrates a few general principles in the use of attributes, which are obviously not limited to colors.

PAUL ISAMBERT, Ponctuation française avec LuaT_EX [French punctuation with LuaT_EX]; pp. 87–100

If T_EX had been created by a French man, maybe it would have a primitive dedicated to inserting spaces before some punctuation signs (question mark, exclamation mark, colon, semi-colon) as is usual in the French typographical tradition — but this wasn't the case. LuaT_EX is not written by a French team either, but it enables handling character lists while texts are being typeset. The goal of

this work is to illustrate its power by presenting Lua algorithms meant to insert the proper space before those symbols that require it.

TACO HOEKWATER, LuaT_EX 0.65 et les mathématiques [LuaT_EX 0.65 and mathematics]; pp. 101–127

The math machinery in LuaT_EX has been completely overhauled since version 0.40. The handling of mathematics in LuaT_EX has been extended quite a bit compared to how T_EX82 (and therefore pdfT_EX) handles math. First, LuaT_EX adds primitives and extends some others so that Unicode input can be used easily. Second, all of T_EX82's internal special values (for example for operator spacing) have been made accessible and changeable via control sequences. Third, there are extensions that make it easier to use OpenType math fonts. And finally, there are some extensions that have been proposed in the past that are now added to the engine.

This article is an update of the original article that was published in *MAPS* 38, documenting the changes in LuaT_EX between version 0.40 and version 0.65.

THIERRY BOUCHE, Colophon; pp. 128–130