

A Quick Look at L^AT_EX

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1 Introduction

L^AT_EX is a typesetting system developed by Leslie Lamport[4]. It builds on foundations created by Donald Knuth's T_EX system[3]. T_EX became very popular within the scientific community because it was very good at producing mathematical manuscripts. It was extremely powerful and provided the user with exceptional control of the presentation of their documents. In the 80s, Lamport began developing L^AT_EX, which was designed to add a layer of abstraction on top of T_EX which allows the user to focus more on the document structure, rather than getting too bogged down with presentation issues. L^AT_EX also added extra functionality through auxiliary programs that can generate bibliographies, tables of contents, indices, tables, cross-references and figures.

2 How to learn more

Here are some well established resources to help you learn more about this excellent system.

- General L^AT_EX resources - the excellent L^AT_EX Companion[1] is a broad, yet in depth look at the most important aspects.
- Graphics - take a look at Rahtz's[6] survey of graphics techniques in T_EX.
- Bibliographies - the best place to start would be the BIB_TE_X documentation[5].
- Extras - The CTAN archives[2] contain a vast number of supplementary features, such as packages, macros, styles, etc., that can extend the potential of L^AT_EX even further.

References

- [1] Michel Goossens, Frank Mittlebach, and Alexander Samarin. *The Latex Companion*. Addison-Wesley, Reading, Massachusetts, 1993.
- [2] George D. Greenwade. The Comprehensive Tex Archive Network (CTAN). *TUG-Boat*, 14(3):342–351, 1993.

- [3] Donald E. Knuth. *Tex and Metafont, New Directions in Typesetting*. American Mathematical Society and Digital Press, Stanford, 1979.
- [4] Leslie Lamport. *Latex: A Document Preparation System*. Addison-Wesley, Reading, Massachusetts, second edition, 1994.
- [5] Oren Patashnik. BibTeXing. documentation for general BibTeX users. Electronic document accompanying BibTeX distribution, 1988.
- [6] Sebastian Rahtz. A survey of Tex and graphics. Technical Report CSTR 89-7, Department of Electronics and Computer Science, University of Southampton, UK, 1989.