Programming Dynamic LaTeX Documents

James J. Quirk
Computer & Computational Sciences Division
Los Alamos National Laboratory
quirk@lanl.gov

March 17, 2003

Abstract This talk will present an overview of a co-operative programming model for generating dynamic LaTeX documents. The basic aim, at least in the area of computational science where the model was conceived, is to allow researchers to substantiate scientific articles with inline computer simulations whose code is open to hard scrutiny.

The current implementation (see http://www.amrita-ebook.org/drink-me) leverages off pdfLaTeX in a sufficiently general manner to be of interest beyond its specialist origins. And the talk will describe how TeX is utilized to bring out its typesetting strengths, while hiding its programming weaknesses. Thus the material might serve to add a fresh perspective on the developments needed to keep TeX relevant in the 21st century.