Announcement from the \texttt{LATEX3} Project team

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We are pleased to present the final report on ‘Math Font Encoding’ produced by Justin Ziegler for the \texttt{LATEX3} project. This document is electronically available from the CTAN hosts in the directory

\begin{verbatim}
/tex-archive/info/ltx3pub
\end{verbatim}

To process the document you will need the files

\begin{verbatim}
l3d007.tex  
l3ms002.cls
\end{verbatim}

The document is about 90 pages long. In one of the appendices, there are three font tables using fonts which are often not part of a \texttt{LATEX} installation. However, you can process the rest of the document successfully without them (just ignore the error messages they generate:-).  

The rest of this announcement is lifted straight from the preface of the document.

Justin has worked for three months at the Johannes Gutenberg University Mainz. His work was generously sponsored by GUTenberg (The French \TeX Users Group) and by the ZDV of the University of Mainz (Data Processing Center), the latter providing Justin with office space and taking care of the administrative details.

In the past years a lot of work went into integrating new fonts into the \TeX system. Only five years ago, typesetting with \TeX basically meant typesetting in Computer Modern. Nowadays many users can choose (at least theoretically) from several thousands of fonts. Today, NFSS is the standard font selection in \texttt{LATEX} and due to this mechanism and the fontinst-package by Alan Jeffrey virtually every PostScript font, in fact, every font for which a \texttt{tfm}-file can be obtained, can be used, out of the box, with \texttt{LATEX}.

But for these thousand text fonts there are only five font families for use in math formulas to go with them. Even worse, every of these math font sets are encoded in a different way making it nearly impossible even for an expert \TeX user to use different fonts for math in different jobs.

The work undertaken by Justin is the first of several steps to solve the problems at hand, the final goal being the development of a system that allows the user to change math fonts as painlessly as it is now possible with text fonts.

Based on Justin’s analysis and his proposal, the \texttt{LATEX3} Project is now undertaking to provide a prototype implementation for math fonts, starting with the Computer Modern fonts as well as the Euler Math fonts. We expect this implementation to be available for public usage during 1995-96.