JONATHAN BORWEIN, CECM, Simon Fraser University, British Columbia Digitizing the entire mathematical literature: what wild surmise!

THE DIGITAL MATHEMATICS LIBRARY. The 'DML' project proposes over the next decade to put on line (scanned images) the entire printed corpus of Mathematics and to make it generally available. It is estimated that between five and ten percent is already available, though hard to find or access! A good idea of some of the progress already made can be gathered at the European Math Society's website (http://elib.uni-osnabrueck.de/EMIS/). As was clear from a meeting I attended at NSF in late July, the project has significant support from NSF and from its German counterpart. NRC-CISTI was also present, and seems likely to assist in digitizing our own Canadian content.

It is generally agreed that the greatest obstacle to success is neither financial¹ nor technical but lies in the incredibly complicated intellectual property and rights management issues that will have to be addressed. For example, in some settings one may have to request permission from the estate of authors deceased as much as 70 years ago, as they certainly never anticipated such a use of their work.² More surely, while Springer-Verlag is already 'on-board', we shall have to come to some 'modus vivendi' with other large publishers such as Elsvier.

That said, success would represent an epochal event in cultural history. The material will, with caveats, be assured for posterity, it will be searchable (eventually the mathematics as well as the text), and we (mathematicians and others) will discover many things we do not know that we know.

¹Though the cost is likely to be somewhere between \$100 and \$200 million US.

²A recent US Supreme Court ruling told the New York Times that it had to pay free-lancers again when it put pre-digital material on its website.