

1116-68-2021 **Stephen M. Watt*** (smwatt@uwaterloo.ca), David R. Cheriton School of Computer Science,
University of Waterloo, Waterloo, Ontario N2L 3G1, Canada. *Assembling the World's
Mathematical Knowledge.*

As is true in many other areas of discovery, mathematical knowledge had been produced for centuries and will continue to be produced for centuries to come. The records have taken many forms, from stone carvings, to manuscripts, to print journals and now digital media. Unlike most other areas, a great deal of mathematical knowledge has a degree of precision and objectivity that both gives it permanent value and makes it susceptible to mechanized treatment. We outline a path to assembling the world's mathematical knowledge, initially in the form of a comprehensive digital library of page images and evolving to a knowledge base to support sophisticated queries and automated reasoning. It is the aim of the nascent International Mathematical Knowledge Trust to provide a framework and to foster a community to make progress in this direction. We can foresee that such a knowledge base will enhance the capacity of individual mathematicians, accelerate discovery and allow new kinds of collaboration. (Received September 21, 2015)