

Mathematical Libraries and Knowledge Management, or There and Back Again

Stephen Watt

University of Waterloo

smwatt@uwaterloo.ca

As its statements can be both deep and unambiguous, mathematical knowledge is both well-suited and promising for machine treatment. At the same time, mathematical results have a longevity of utility that gives their systematic handling a practical motivation. It has now been twenty years since the first International Workshop on Mathematical Knowledge Management and, since then, the subject has grown and matured to become a rich field of study. But we do not yet have a comprehensive, accessible digital library of the mathematical literature. We examine the state of digital mathematical literature collections, the series of developments necessary to give immediate practical impact, and the longer path where mathematical knowledge management enhances the utility of these digital collections.