1135-03-2040   **Thomas Hales***, Math Department, University of Pittsburgh, Pittsburgh, PA 15260. *Formal Abstracts in Mathematics.* Preliminary report.

Formal proof technology has been under development for decades. With sufficient effort, it is now possible to give a complete formal verification of long and complex mathematical proofs.

   This talk will describe recent efforts to extend formal proof technology so that all mathematicians might benefit. A formal abstract service gives the statement of the main theorem and definitions of each published mathematical paper. The abstracts are written in a language that is readable by both humans and machines. The definitions are grounded in a foundational system for doing mathematics. (Received September 25, 2017)