1163-03-795 Patrick Lutz* (pglutz@berkeley.edu). Recent progress on Martin's conjecture.

Martin's conjecture is an attempt to classify all functions on the Turing degrees under strong set-theoretic hypotheses. Roughly, it says that every function from the Turing degrees to the Turing degrees is either eventually constant or eventually a (transfinite) iterate of the Turing jump. The conjecture has also been proposed as a partial explanation for the absence of natural Turing degrees strictly between 0 and 0'. I will explain the conjecture and report on some recent progress, including joint work with Benny Siskind and with Vittorio Bard. (Received September 12, 2020)