Jennifer Chubb Reimann* (jcc31@psu.edu), University of San Francisco, Department of Mathematics, 2130 Fulton St., San Francisco, CA 94117. Effective properties of approximable functions.

We investigate the algorithmic properties of functions in the context of strong reducibilities (refinements of Turing reducibility). In particular, we consider effectively approximable functions (limits of uniformly computable sequences of functions), especially those that are limits of pointwise decreasing approximations. We will consider natural examples of such functions (in computable structures and otherwise) and make further investigations in the appropriate context. (Received December 13, 2011)