► KATRIN TENT, Computable functions on the reals. Fakultät für Mathematik, Universität Bielefeld, Postfach 100131, 33501 Bielefeld, Germany .

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We introduce a new notion of computable function on the reals and prove some basic properties. We give two applications, first a short proof of Yoshinaga's theorem that periods are elementary (they are actually low). We also show that the low real numbers form a real closed field which is closed under exponentiation and some other special functions. For holomorphic functions we prove a local-global principle.