1067-AC-297   **Jeffrey C Lagarias*** (`lagarias@umich.edu`), Dept. of Mathematics, Univ. of Michigan, 530 Church Street, Ann Arbor, MI 48109-1043. *The Takagi function.*

Teiji Takagi (1875-1960) is well known in number theory for his important work in class field theory. He studied at Berlin, then at Goettingen with David Hilbert, and completed his degree in Japan in 1903. He had many interests, and wrote an early paper constructing a continuous nondifferentiable function on the unit interval, now called the Takagi function. We will discuss properties of this function, which has a fractal appearance. These properties involve number theory and probability theory. (Received August 17, 2010)