

1046-11-1391 **Dominic W Klyve*** (dklyve@carthage.edu), Carthage College, 2001 Alford Park Dr., Kenosha, WI 53140. *The search for base-2 Fibonacci pseudoprimes.*

An open question of Pomerance, Selfridge, and Wagstaff asks whether there is any number $n \equiv \pm 2 \pmod{5}$ that is simultaneously a base-2 pseudoprime and a Fibonacci pseudoprime. This talk will discuss joint work with D. Monfre on a new computer search for such a number, extending former searches by a factor of about 100. We will present statistical data from our search, and give a heuristic for the existence of such a number, despite the failure of searches to date. (Received September 15, 2008)