Jonathan Webster* (jewebste@butler.edu) and Andrew Shallue. New ideas for tabulating Baillie-PSW pseudoprimes. Preliminary report.

This talk will discuss how the ideas behind the algorithm to find strong pseudoprimes to many bases may be applied to the tabulation of Baillie-PSW pseudoprimes. Such a composite number \( N \) is simultaneously a base-2 Fermat pseudoprime, a Lucas pseudoprime with respect to a certain quadratic polynomial with discriminant \( D \), and satisfies \( (D|N) = -1 \). There is a 620 USD reward for such a number. (Received September 20, 2016)