TEMPLE
MATH CLUB

Investigating Lucas Sequences Under a Modulus – Tommy Pham

WHEN
November 21th 2024
5-6 PM

WHERE
Wachman Hall 617

In 2018, Alex Dishong and Marc S. Renault obtained an algorithm that computes all moduli that produce a given period for the Fibonacci sequence, $G_0 = 0$ and $G_1 = 1$. In this paper, we aim to generalize their result by replacing the Fibonacci sequence with generalized Fibonacci sequences, $G_0 = a$ and $G_1 = b$. We conclude the paper by providing proofs of the main details of the algorithm and a conjecture.