Clark Kimberling, Takao Komatsu, Kálmán Liptai, and László Szalay A Connection Between Hyper-Fibonacci Numbers and Fissions of Polynomial Sequences,

Fibonacci Quart. 56 (2018), no. 3, 195–199.

Abstract

We prove a new formula for hyper-Fibonacci numbers, $F_n^{[k]}$, using fissions of certain polynomials. The result is a concise description of the entries of the matrix of hyper-Fibonacci numbers.