Abstract

The Diophantine equation $F_1^k + F_2^k + \cdots + F_{n-1}^k = F_{n+1}^l + F_{n+2}^l + \cdots + F_{n+r}^l$ in positive integers $n, r, k, l$ with $n \geq 2$ is studied where $F_n$ is the $n$th term of the Fibonacci sequence.