Hùng Việt Chu, David C. Luo, and Steven J. Miller
*On Zeckendorf Related Partitions Using the Lucas Sequence*,
Fibonacci Quart. **60** (2022), no. 2, 111–119.

**Abstract**

Zeckendorf proved that every positive integer has a unique partition as a sum of nonconsecutive Fibonacci numbers. Similarly, every natural number can be partitioned into a sum of nonconsecutive terms of the Lucas sequence, although such partitions need not be unique. In this paper, we

(1) prove that a natural number can have at most two distinct nonconsecutive partitions in the Lucas sequence,
(2) find all natural numbers with a fixed term in their partition, and
(3) calculate the limiting value of the proportion of natural numbers that are not uniquely partitioned into the sum of nonconsecutive terms in the Lucas sequence.