Augustine O. Munagi
An Identity for Inverse-Conjugate Compositions,
Fibonacci Quart. **58** (2020), no. 5, 161–165.

Abstract

We prove a combinatorial identity between two classes of inverse-conjugate compositions, that is, integer compositions whose conjugates are given by a reversal of their sequences of parts. These are the set of inverse-conjugate compositions of $2n+3$ without 2's, and the set of inverse-conjugate compositions of $2n-1$ with parts not exceeding 3. Both sets are enumerated by $2F_n$, where F_n is the nth Fibonacci number.