Wojciech Guzicki and Piotr Zakrzewski Bijective Proofs of Formulas with  $(-1)^n$ , Fibonacci Quart. **60** (2022), no. 3, 262–266.

## Abstract

We present simple bijective proofs of formulas involving the expression  $(-1)^n$  connected to three different combinatorial problems. Our arguments somewhat resemble the combinatorial proofs of Benjamin-Ornstein and Elizalde of the familiar derangement recurrence.