de Francesco Albasini, Luisa; **Salvi, Norma Zagaglia**
On the adjacent cycle derangements. (English) Zbl 1258.05002
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Summary: A derangement, that is, a permutation without fixed points, of a finite set is said to be an adjacent cycle when all its cycles are formed by a consecutive set of integers. In this paper we determine enumerative properties of these permutations using analytical and bijective proofs. Moreover a combinatorial interpretation in terms of linear species is provided. Finally we define and investigate the case of the adjacent cycle derangements of a multiset.

MSC:

05A05   Permutations, words, matrices
05A15   Exact enumeration problems, generating functions

Keywords:

derangement; permutation without fixed points; cycles; enumerative properties; analytical proofs; bijective proofs; linear species; adjacent cycle derangements; multiset

Full Text: DOI

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