

**ADDENDUM TO HIERARCHIES OF PALINDROMIC
SEQUENCES IN THE SYMMETRIC GROUP S_n**

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(Received: May 10, 2020 Accepted: May 19, 2020 Published: Jun. 30, 2020)

Abstract: In this note we provide important additional observations on the Hierarchies of Palindromic sequences in the Symmetric Group S_n .

Keywords and Phrases: Sequences, sets, palindromic numbers.

2010 Mathematics Subject Classification: 11A99, 11B99, 97A20, 97F30.

1. Introduction, Notations and Definitions

A palindrome is a word, phrase or a number or sequence of words that reads the same forwards or backwards. A few examples of palindromic words are:

BOB, EVE, ANNA, HANNAH, MADAM, MALAYALAM, ...

“The longest palindromic word in the Oxford English Dictionary is:

tattarrattat \Leftrightarrow tat tar rat tat

coined by James Joyce in *Ulysses* (1922) for a knock on the door. The Guinness Book of Records gives¹ the title to ‘detartrated’..., meaning ‘to remove tartrates’, in Chemical Engineering.”

¹From the ubiquitous Wikipedia.