

## On 12-regular nut graphs

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A nut graph is a simple graph whose adjacency matrix is singular with 1-dimensional kernel and corresponding eigenvector with non-zero elements. For each  $d \in \{3, 4, \dots, 11\}$  are known all values  $n$  for which there exists a  $d$ -regular nut graph of order  $n$ . In the talk, we consider all values  $n$  for which there exists a 12-regular nut graph of order  $n$ .