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ENERGY OF FIBONACCI PRODUCT CORDIAL GRAPH

Tessymol Abraham and Shiny Jose*

Department of Mathematics,
Baselius College, Kottayam - 686001, Kerala, INDIA

E-mail : tessy02@gmail.com

*Department of Mathematics,
St. George's College, Aruvithura - 686122, Kerala, INDIA

E-mail : shinyjosedavis@gmail.com

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Abstract: Let G be a Fibonacci product cordial graph with n vertices. Then the Fibonacci product cordial label energy of G is denoted by $E_{FPCL}[G]$ and is defined as $E_{FPCL}[G] = \sum_{i=1}^{n} |\rho_i|$, where ρ_i are the eigenvalues of the Fibonacci product cordial labeled matrix. In this paper, we introduce the Fibonacci product cordial labeled matrix, Fibonacci Product Cordial Labeled Laplacian matrix, Fibonacci product cordial label Laplacian energy, Fibonacci product cordial label equi-laplacian energic graphs respectively.

Keywords and Phrases: Fibonacci product cordial label energy, Fibonacci Product Cordial Labeled Laplacian matrix, Fibonacci product cordial label Laplacian energy, Fibonacci product cordial label equi-laplacian energic graphs.

2020 Mathematics Subject Classification: 05A, 05C31.

1. Introduction

Graph labeling is a strong communication between number theory and graph structure. For standard terminology and notations related to graph theory we refer to [8] while for graph labeling we refer to [5]. Rokad A. K. and G. V. Ghodasara created a new idea called Fibonacci cordial labeling by integrating the Fibonacci number and congruence notion in number theory with the cordial labeling idea