



## BOUNDS FOR THE FIRST ZAGREB INDEX OF A SPLICE AND LINK GRAPHS

V. LOKESHA

Department of Studies in Mathematics, Vijayanagara Sri Krishnadevaraya University,  
Ballari, Karnataka, India  
(E-mail: v.lokesha@gmail.com)

SUVARNA

Department of Studies in Mathematics, Vijayanagara Sri Krishnadevaraya University,  
Ballari, Karnataka, India  
(E-mail: suvarnasalimath17@gmail.com)

and

A. S. MARAGADAM

Department of Studies in Mathematics, Vijayanagara Sri Krishnadevaraya University,  
Ballari, Karnataka, India  
(E-mail: maragadamvijay@gmail.com)

**Abstract:** Graph operations serve to obtain larger graphs and vice versa. The term of corona of two graphs was introduced by Frucht and Harary in 1970. The main objective of this paper is to obtain the explicit interpretation of first Zagreb index in terms of the graph size and maximum or minimum vertex degrees of splice and link graphs.

---

Communicated by Editors; Received November 16, 2023

AMS Subject Classification: 05C76, 05C09, 05C07, 05C35, 05C90.

Keywords: Graph operations, Degree, Connected graph, Topological indices.