

1163-15-1526

Hein van der Holst* (hvanderholst@gsu.edu). *Some signed graphs (G, Σ) with $\nu(G, \Sigma) \leq 3$.*

Arav et al. introduced the Colin de Verdiere-type parameter ν on signed graphs. They proved that the class of signed graphs (G, Σ) with $\nu(G, \Sigma) \leq 1$ coincides with the class of bipartite signed graphs (signed graph with no odd cycles), and gave a complete characterization of the class of signed graphs (G, Σ) with $\nu(G, \Sigma) \leq 2$. A signed graph (G, Σ) is projective if G can be embedded in the projective plane and the odd cycles are exactly those that are orientation-reversing. We show that if a signed graph (G, Σ) is projective, then $\nu(G, \Sigma) \leq 3$. (Received September 15, 2020)