

## **On the Bicycle Spectrum of Graphs**

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The cycle spectrum of a graph, or the collection of all cycle lengths, has been the focus of considerable inquiry. Since graphic matroids are based on the cycles of graphs, results in this field apply immediately to matroids. From the study of bicircular matroids, we characterized graphs with bicycles of very few sizes. From those results, we continue the investigation of the sizes of graph bicycles, or connected sets of edges containing exactly two cycles and no leaves. In the presentation, we consider graph properties which guarantee bicycles of consecutive sizes. In particular, we consider graphs with minimum degree  $3k$  to show there exists a set of bicycles with consecutive sizes.

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