## 1161-05-99 Michael D Plummer\* (michael.d.plummer@vanderbilt.edu), TN 37215, and Art Finbow and Bert Hartnell. On the structure of planar well-covered graphs.

A graph is *well-covered* if all its maximal independent sets of vertices have the same cardinality. The property of being well-covered is known to be co-NP-complete and hence, not surprisingly, the study of such graphs has proven to be difficult. Hence the authors and others have focused on the structure of various special subclasses of these graphs. In the present paper the authors undertake the study of those well-covered graphs which are 4-regular and planar. (Received August 12, 2020)