1163-57-514   **Ramin Naimi**, **Andrei Pavelescu*** (`andreipavelescu@southalabama.edu`) and **Elena Pavelescu**. *Topological Properties of Graphs and Their Complements.*

In this talk, we present some connections between the order and the topological properties of a simple graph and the topological properties of its complement. In 1962, J. Battle, F. Harary, and Y. Kodama, J.R. Ball, and W. T. Tutte independently proved that the complement of a planar graph of order 9 is not planar, thus proving that K_9 is not bi-planar. In this talk, we discuss similar statements about linkless embeddable graphs, intrinsic knotted graphs, and several other hereditary classes of graphs. (Received September 08, 2020)