## 1154-VP-293 Gary Chartrand and James Hallas\* (james.r.hallas@wmich.edu), 1903 W Michigan Ave, Kalamazoo, MI 49008-5248, and Ebrahim Salehi and Ping Zhang. Irregularity Strength and Beyond.

As far back as 1880, in an attempt to solve the Four Color Problem, there have been numerous examples of certain types of graph colorings that have generated other graph colorings of interest. These types of colorings only gained momentum a century later, however, when in the 1980s, edge colorings were studied that led to vertex colorings of various types, led by the introduction of the irregularity strength of a graph. In this talk, we take another look at the concept of irregularity strength and describe a related concept. Results and conjectures are presented on this topic. This is joint work with Gary Chartrand, Ebrahim Salehi, and Ping Zhang. (Received August 29, 2019)