## 1145-05-1908Addie E. R. Armstrong\* (aarmstro@norwich.edu), Department of Mathematics, 158 Harmon<br/>Drive, Northfield, VT 05663. Steinberg's Conjecture is almost true?

A famous conjecture of Steinberg posited that all planar graphs containing no 4-cycles or 5-cycles are 3-colorable. The conjecture was demonstrated to be false in 2016 by Cohen-Addad et. al. This begs the question: How close to 3-colorable are Steinberg-type graphs? In this talk, we introduce a stronger form of defective coloring, discuss its application to Steinberg-type graphs, and demonstrate that the known counterexample to the conjecture is, in fact, colorable with this new form of defective coloring, hinting at the fact that Steinberg's original conjecture was very close to true. (Received September 24, 2018)