1135-VP-3162 **Rebecca Robinson\*** (`rebrobin@umflint.edu`) and **Cameron McLeman**. *Chromatic Polynomials of Graph Subdivisions and the Integral Root Problem.*

The most rudimentary tool used in computing chromatic polynomials of graphs is the multiplication principle. For graphs for which this tool is sufficient, we automatically find chromatic polynomials whose roots are all integers. It is interesting to note that the converse to this observation is false – there exist graphs whose chromatic polynomials have all integer roots, and yet which cannot be computed solely via the multiplication principle. In this talk, we present a theorem on chromatic polynomials of graph subdivisions and use it to shed light on some families of such graphs. (Received September 26, 2017)