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Samantha Dahlberg* (samadahl@math.ubc.ca), Mathematics Department, 1984 Mathematics Road, Vancouver, BC V6T 1Z2, Canada. *Chromatic symmetric functions and e-positivity.*

Richard Stanley introduced the chromatic symmetric function X_G of a simple graph G , which is the sum of all possible proper colorings with colors $\{1, 2, 3, \dots\}$ coded as monomials in commuting variables. These formal power series are symmetric functions and generalize the chromatic polynomial. In this talk we discuss which graphs G have a X_G that can be written as a non-negative sum of elementary symmetric functions, and additionally we will also resolve Stanley's e -Positivity of Claw-Contractible-Free Graphs. This is joint work with Angele Foley and Stephanie van Willigenburg. (Received February 11, 2018)