

Recent Results on Chromatic Polynomials

Jason Brown, Dalhousie University

The well known *chromatic polynomial* of a finite graph G counts the number of ways the vertices of a graph can be colored with x colours so that adjacent vertices receive different colors. Chromatic polynomials were initially introduced while working on the Four Color Conjecture, but have a long and varied history, studied not only for what they can say about chromatic theory but also as analytic and algebraic objects of interest in their own right. In this talk I will present recent work on new bounds for chromatic polynomials as well as results on the real part, imaginary part and moduli of their roots.

Keywords: graph, coloring, chromatic polynomial, root