Title

Sphere maps and polynomials constant on a hyperplane (or line)

Speaker: Jiri Lebl, Oklahoma State University.
Date: Feb 25, 2019
Time: 3:30 PM
Room: MSCS 509

Abstract: Classifying polynomial/rational maps of spheres leads to an interesting combinatorial problem. In the simplest setting: if a polynomial \( p(x, y) \) of degree \( d \) has \( N \) positive coefficients and no negative coefficients, and \( p(x, y) = 1 \) whenever \( x + y = 1 \), then \( d \leq 2N - 3 \). The proof leads to so-called Newton’s diagrams that can be easily drawn and analyzed. The talk should be very accessible.