

962-26-972

Valerio De Angelis* (vdeangel@xula.edu), Mathematics Department, Xavier University of Louisiana, 1 Drexel Drive, New Orleans, LA 70125. *Polynomials with a positive power.*

Preliminary report.

Consider the polynomials $p(x) = 2 + 4x - 3x^2 + 4x^3 + 2x^4$ and $q(x) = 2 + 2x - x^2 + 2x^3 + 2x^4$. Then q^2 has no negative coefficients, while every power of p contains some negative coefficients. In this talk we address the question: when does some power of a polynomial have only positive coefficients? Some partial results will be presented. (Received October 01, 2000)