1047-11-350 **Ernie Croot***, Georgia Institute of Technology, School of Math, 103 Skiles, Atlanta, GA 30332. Sums and Products in C[x].

Suppose that A is a set of monic polynomials in $\mathbb{C}[x]$. A polynomial analogue of a conjecture of Erdos and Szemeredi says that either the set of sums f(x) + g(x) or set of products f(x)g(x) of polynomials chosen from A, must be at least $|A|^{2-o(1)}$, where the o(1) tends to 0 as |A| tends to infinity. In this talk we will present some results that are a good step towards proving this conjecture. This is joint with Derrick Hart. (Received February 02, 2009)