Vitaly Bergelson, Department of Mathematics, 231 West 18th Avenue, Columbus, OH 43210, and Donald Robertson* (robertson@math.utah.edu), Department of Mathematics, 155 S 1400 E, Salt Lake City, 84112. Intersective Polynomials and Recurrence.

In this talk I will describe recent progress made with V. Bergelson on recurrence and multiple recurrence for \mathbb{Z}^d actions along intersective polynomials - polynomials having a common root modulo any congruence. Specifically, I will describe new collections of intersective polynomials for which multiple recurrence is known to hold, and a strengthening of the structure of single recurrence times along an intersective polynomial. (Received August 23, 2015)