MSRI–Evans Talk

Monday, 4:10–5:00pm, 60 Evans

Nov. 17   **Vitaly Bergelson**

Ergodic Ramsey Theory: Old and New Results and Conjectures

The talk will be devoted to the review of the mutually perpetuating connections between polynomials, uniform distribution, combinatorics and Ergodic Theory, and to the discussion of open problems and promising directions of research.

Here is a sample of topics to be discussed:

Furstenberg's correspondence principle and multiple recurrence

Polynomial Szemeredi theorem and its ramifications

Polynomial growth versus exponential growth

Generalized polynomials and translations on nilmanifolds

The role of ultrafilters in ergodic Ramsey theory

Ergodic Ramsey theory in positive characteristic