

Distinguished Lecture Series (P. Sarnak)

Integer points on affine cubic surfaces

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Abstract: A cubic polynomial equation in four or more variables tends to have many integer solutions, while one in two variables has a limited number of such solutions. There is a body of work establishing results along these lines. On the other hand very little is known in the critical case of three variables. For special such cubics, which we call Markoff surfaces, a theory can be developed. We will review some of the tools used to deal with these and related problems. Joint works with Bourgain/Gamburd and with Ghosh.

This is the second lecture in the Distinguished Lecture Series.

Thursday, February 28 at 3:30 PM in SES 130