



Department of Mathematics  
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# Seminar

*Polynomial method in combinatorics,  
incidence geometry and analysis*

*Mr. Bochen LIU  
University of Rochester*

## Abstract

This is a survey talk about recent development in polynomial method. Polynomial method can date back to the study of diophantine equations in early 20th century. During last ten years, different versions of polynomial methods have been developed in combinatorics, incidence geometry and analysis. In this talk I will explain how polynomial methods work on Kakeya problem over finite fields, Erdos distance problem on the plane and restriction estimate on  $\mathbb{R}^3$ .

**Date :** December 5, 2016 (Monday)  
**Time :** 3:15pm – 4:15pm  
**Venue :** Room 219, Lady Shaw Building,  
The Chinese University of Hong Kong

*All are Welcome*