

Topics in Harmonic Analysis - Math 542

Spring 2013

- *Instructor: Malabika Pramanik*
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- *Office hours: To be announced.*
- **Web page:** The course website is
<http://www.math.ubc.ca/~malabika/teaching/ubc/spring13/math542/index.html>
- **Pre-requisites:** Math 541 or its equivalent.
- **Topics :** A sample of selected problems whose solutions involve harmonic analysis.
 - Fourier analytic methods in convex geometry - the Busemann-Petty problem.
 - The discrepancy method.
 - Variants of the Hilbert transform.
- **Lectures :** Tuesday, Thursday 9:30-11 am in Buchanan D325.
- **Grading Policy :** There will be no homework assignments. You will be asked to give 2-3 oral presentations related to the course material not covered in detail by the instructor. In addition, you will need to turn in a short expository paper on one of the topics of your presentation. The content of your oral presentations and written submission should be discussed with the instructor.