

THE FIELDS INSTITUTE



OVERVIEW

The Fields Undergraduate Summer Research Program (FUSRP) welcomes carefully selected undergraduate students from around the world for a rich mathematical research experience in July and August.

Each year, up to 25 students are selected from hundreds of applicants from mathematics-related disciplines to participate in the Program. Student placements are mostly based at the Fields Institute in Toronto, Ontario, Canada.

The project experience, quality mentorship, and independent/team work are intended to foster enthusiasm for continued research. Students work closely with each other and with their supervisor in a collaborative research team.

GOAL

To provide a high-quality and enriching mathematics research experience for undergraduates.

2017 RESEARCH PROBLEMS

Eleven excellent projects to choose from (see application form for details).

PROJECTS	SUPERVISOR(S)
A Problem from Verifying Integer Programming Results	Kevin Chueng, Carleton University
Acoustic Properties of Laminated Structures	Peter Gibson, York University
Counting Bi-tangent Lines to Curves	Yoav Len, University of Waterloo
Local Dimensions of Self-similar Measures with Overlap	Kevin Hare, University of Waterloo
	Kathryn Hare, University of Wαterloo
Lower Bounds for Semidefinite Programming Relaxations to Combinatorial Optimization Problems	Konstantinos Georgiou, Ryerson University
Pseudo-spectral and Collocation Methods for Solving the Schrodinger Equation	Tucker Carrington, Queen's University
Sensitivity of the Orr-Sommerfeld Equation to Changes in Base Flow	Pierre Sullivan, University of Toronto

DATES

Application deadline:February 28, 2017Program starts/ends:July 4-August 31, 2017Visit website for complete program schedule.

ORGANIZING COMMITTEE

Huaxiong Huang, Deputy Director Esther Berzunza, Manager of Scientific Programs The Fields Institute

Alec Jacobson, University of Toronto
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For program and application details, please visit: www.fields.utoronto.ca/activities/17-18/2017-fusrp



