

Report on the 2013 Blundon Seminar Camp (Memorial University of Newfoundland)

Introduction

The W.J. Blundon Seminar is an annual three-day event organised by the Department of Mathematics and Statistics at Memorial University of Newfoundland, and held at its St. John's campus. Senior high school students from across Newfoundland and Labrador are invited to the Seminar based on their performance in the Euclid, Fermat and Cayley contests run by the University of Waterloo, as well as the Blundon contest administered by Memorial University. The Seminar runs for three days and two nights, during which students room together in a University residence.

The goals of the Seminar are to expose Newfoundland and Labrador's best high school students to university-level mathematics and mathematical research; to help them hone their mathematical problem-solving skills; and to familiarise them with the University, with the Department, and with their peers. In addition to interacting with faculty from the Department, the students are also proctored by two senior undergraduate mathematics students (one male and one female), giving them the opportunity to gain insight into the university experience from individuals of a comparable age.

The Blundon Seminar was first held in 1982, and is named in honour of Professor W.J. Blundon, the first head of the Department and an avid problem solver. The 2013 edition was the thirty-second Blundon Seminar.

Itinerary

The centrepiece of the 2013 Seminar was a set of team-oriented problem solving sessions, in which the students were mentored by Memorial faculty. Many of the problems assigned to the students were designed to be more challenging than those typically encountered in high school, and sought to focus on advanced techniques and approaches useful in post-secondary mathematics contests.

These sessions were supplemented by a less traditional problem solving competition called the "Paper Chase", in which the students formed teams to participate in a mathematical scavenger hunt around the Department's facilities. The Paper Chase generally featured less rigorous questions than the standard problem solving sessions, and was instead designed to be a fast-paced and entertaining component of the Seminar schedule.

The students also attended two seminars in which the speaker was asked to deliver a presentation about university-level mathematics using language accessible to the high school audience. Dr. Thomas Humphries, a post-doctoral fellow in the Department, gave a talk about simulation and optimisation, concentrating on the application of mathematics to oil exploration in the Newfoundland offshore. Dr. Taraneh Abarin, an assistant professor in the Department, spoke about the modern frontiers of statistics, tying into the just-completed redevelopment of the Department's Statistics programs and courses.

Finally, the students were invited to a formal banquet at which awards were presented for the best results in the Blundon, Euclid, Fermat and Cayley contests (with the top students in the Pascal contest also recognised for their achievements in absentia).

Income and Expenditure

Funding for the 2013 Seminar was provided by the following:

- Canadian Mathematical Society: \$3500
- Newfoundland and Labrador Department of Education: \$3000
- Newfoundland Power: \$2500
- Canadian Applied and Industrial Mathematics Society: \$500

The total funding from these sources was \$9500. In addition, funding has been promised from Memorial University's Office of Student Recruitment, Pearson Canada, and Nelson Education; however, these amounts have not been confirmed as of this writing.

Expenses for the Seminar included:

- Awards Banquet: \$110 per student
- Meals and Nighttime Snacks (exclusive of the Banquet): \$105 per student
- Housing: \$75 per student
- Transportation: \$55 per student
- Refreshments: \$20 per student
- Prizes from MUN Bookstore: \$20 per student
- Blundon Contest Awards: \$450

- Euclid Contest Awards: \$325
- Fermat Contest Awards: \$400
- Cayley Contest Awards: \$325
- Pascal Contest Awards: \$400
- Honorarium for Male and Female Proctors: \$300

We normally host between 35 and 45 students for the Seminar. For the 2013 Seminar, however, we were able to accommodate only 13 students, with three additional students attending part, but not all, of the Seminar. We were also unable to offer funding for travel to students in Labrador. As such, the actual total expense for the 2013 Seminar was \$7230.