### Blundon Seminar 2011 report and invoice.

Prepared for AARMS by Margo Kondratieva, Dept Math & Stats, Memorial University. 1. The description of the event and activities.

The Blundon seminar is our annual three-day math camp for senior high school students who are interested in mathematics and demonstrate consistently good performance in mathematics competitions. Participation in the seminar is by invitation only based on the results of preceding Blundon, Euclid, Fermat, and Cayley contests. This year we hosted 37 students, including 8 female and 29 male. Please see the Schedule and List of participants for 2011 attached.

The winner of the Blundon Contest was presented with the Blundon Shield, and the winners of other contests were also presented with money and book prizes. The awards for the best results in mathematics competitions were presented during the banquet, where collective and individual photos were taken as well.

During the seminar the students attend two one-hour talks, several problem solving sessions as well as Papers Chase. Below are short descriptions of these activities.

The Paper Chase is a team problem solving activity. About 20 problems are posted in hallways of the Department of Mathematics and Statistics. Answers to each problem gives the number of the next problem, which students have to locate first and then solve. The team which locates and solves the longest chain of problems during two hours wins.

The problem solving sessions are a team problem solving activity. Each team contains about 8 students and is given a separate classroom to discuss and solve problems. There are three 1.5-hour sessions. Solutions of all problems are given to the participants in the end of the event. Selected problems are discussed during the Report on Problem Session meeting. The most successful team receives a price.

Two one hour lectures are given to the students by MUN professors. Lectures focus on techniques and applications of mathematics. Students have an opportunity to discuss the lectures and ask questions during the refreshment breaks and the banquet, where the presenters are invited to dine and converse with the student-participants.

2. Number of participants: 37 students, all from Newfoundland.

3. Publications. No

#### 4. Scientific Highlights.

The Blundon Seminar committee makes sure that our presenters possess world class expertise and give talks on "hot topics" in contemporary mathematics at the level appropriate to high school students in order to provide valuable enrichment for our junior participants, engage them into the discipline and outline possible applications and bright ideas. This year our presenters were the following professors.

**Brajendra C. Sutradhar** is a university professor at MUN. He is an elected member of the International Statistical Institute and a fellow of the American Statistical Association. He has published about 110 papers in statistical journals and a book on dynamic mixed models for familial longitudinal data. He has served as an associate editor for the Canadian Journal of Statistics and the Journal of Environmental and Ecological Statistics. He has served as a member of the advisory committee on statistical methods in Statistics Canada. Professor Sutradhar was awarded 2007 distinguished service award of Statistical Society of Canada. Professor Sutradhar gave a talk "Statistics by examples".

**Ivan Booth** is an associate professor at MUN. He grew up in St. John's and completed his undergraduate degree in Mathematics and Physics at MUN. He received MSc and PhD degrees in Physics at University of Waterloo, After completing his post-doctoral studies at the University of Alberta, he came back to MUN in Sept 2002. He is crossappointed to the Physics department and is an established researcher in the area of general relativity and black holes. Dr. Booth is a recipient of the 2007 Motivational Teaching Award. He sets a great example of possible scientific achievement for our local students. Dr. Booth gave a talk "Time according to Einstein, what it isn't".

Both talks were received by the audience with great interest and generated fruitful discussions about ideas related to the presentations as well as mathematics in general. **5. Budget.** (see attached)

6. Any other notable information. This year two students performed extremely well at the W.J. Blundon Mathematics contest written prior to the seminar. Their names are Nathan Wilson (100%) and Brandon Thorne (99%). The contest can be found at <a href="http://www.mun.ca/math/community/com-blundon/">http://www.mun.ca/math/community/com-blundon/</a> . Nathan Wilson also appeared on the Canadian Honour Roll for Euclid contest 2011. These students had participated in our previous seminars and we partly attribute their success to this participation.

30th	Blundon	Seminar	Schedule 2011	
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Time	Event	Room
Wednesday	, May 18, 2011	
5:00 p.m.	Registration and Room Allocation (staying in Blackall)	Hatcher House
5:30 p.m.	Dinner (Money Provided)	Student Centre
7:30 p.m.	Introductions: Dr. Margo Kondratieva, Seminar Coord.	A-1043
7:40 p.m.	Welcome to MUN: Dr. Chris Radford, Head, Dept. of Math. & Stats.	A-1043
7:45 p.m.	Welcome to MUN: Dr. Mark Abrahams, Dean of Science	A-1043
8:00 p.m.	Talk: Dr. Brajendra Sutradhar, Dept. of Math. & Stats., "Statistics by Examples"	A-1043
9:00 p.m.	Refreshments	Arts Lobby
9:30 p.m.	Movies/TV	Math. Bldg.
Thursday,	May 19, 2011	
7:00	Breakfast (Money provided)	Student Centre
8:55 a.m.	Short Introduction to Problem Sessions:HH-3026D. Dyer/R. Haynes	
9:00 a.m.	Problem Session	HH- 3013, 3015, 3017, 2005, 3026
10:30 a.m.	Break	НН-3022
11:00 a.m.	Talk: Dr. Ivan Booth, Dept. of Math. & Stats., "Time according to Einstein, what it isn't"	A-1043
12:00 a.m.	Lunch (Money provided)	Student Centre
1:00 p.m.	Paper Chase - S. Sullivan Math. Building	
2:30 p.m.	Break	HH-3022
3:00 p.m.	Problem Session	HH- 3013, 3015, 3017, 2005, 3022 Please note: HH-3022 instead of HH-3026
5:45 p.m.	Group Photo and Banquet	Junior Common Room, R. Gushue Hall
8:00 p.m.	Free Time/Movies	Math. Bldg.
Friday, Ma	y 20, 2011	
7:00	Breakfast (Money Provided)	Student Centre
9:00 a.m.	Problem Session	HH-3013, 3015, 3017, 2005, 3026
10:00 a.m.	Break HH-3022	
10:30 a.m.	Report on Problem Sessions - D. Dyer/R. Haynes	HH-3026
11:15 a.m. 12:15 p.m.	Closing Remarks/Presentation of Prizes: Dr. Margo HH-3026 Kondratieva	

It is important to be on time for all sessions. Please wear appropriate dress for the banquet and any questions/inquiries please contact Leonce 864-8784 or your Proctor. The telephone number for MUN Security is 864-8561.

## List of Students Attending Seminar 2011 (37 students) (8 female, 29 male) + 1 male and 1 female proctor

Name	School
Kent Noonan (male)	Baccalieu Collegiate
Cole Walsh (male)	Canon J.T. Richards High
Aaron Bailey (male)	Carbonear Collegiate
Allison Conway (female)	Carbonear Collegiate
Aaron Finn (male)	Carbonear Collegiate
Ri Guang Li (Allan) (male)	Clarenville High
Derrick Strong (male)	Clarenville High
Brianna Loder (female)	Corner Brook High
Brandon Thorne (male)	Crescent Collegiate
Crystal Mouland (female)	Discovery Collegiate
Rebecca Smith (female)	Discovery Collegiate
Gregory Baird (male)	Exploits Valley High
Marwan Barakji (male)	Exploits Valley High
Chris Pardy (male)	Exploits Valley High
Chris Langdon (male)	Gander Collegiate
Peter Dawe (male)	Gonzaga High
Rebecca O'Leary (female)	Gonzaga High
Anthony Parrall (male)	Gonzaga High
Christopher Pike (male)	Gonzaga High
Christopher Stanbridge (male)	Gonzaga High
Ben Collingwood (male)	Holy Heart High
Nelson Lau (male)	Holy Heart High
Yi Fu Liao (male)	Holy Heart High
Yiqing Zhu (male) grade 10	Holy Heart High
Allan Dawe (male)	Holy Spirit High
Tyler Stapleton (male)	Holy Spirit High
Matthew Chaulk (male)	Lewisporte Collegiate
Krista Burton (female)	Mount Pearl Senior High
Timothy Elliott (male)	Mount Pearl Senior High
Daniel Juteau (male)	Mount Pearl Senior High
Laura O'Neill (female)	Mount Pearl Senior High
Joshua Penney (male)	Mount Pearl Senior High
Mark Holden (male)	O'Donel High
Rebecca Hynes (female) )	O'Donel High
Jonathan St. Croix (male)	Prince of Wales Collegiate
Matthew Greenslade (male)	Queen Elizabeth High
Damian White (male)	Queen Elizabeth High
Jonathan Lomond (male)	Proctor
Kelly Clarke (female)	Proctor

# Blundon Seminar Costs - 2011

Bradley Wheaton - Bay d'Espoir Academy - Grand Falls - \$120

Brandon Thorne - Crescent Collegiate - Whitbourne - \$40

Andrew Hillier - Elwood Regional High - Deer Lake - \$150

Dillon Butt - Clarenville High - Clarenville - \$60

Matthew Knight - Clarenville High - Clarenville - \$60

Jordan Anstey - New World Island - Summerford - \$400 (3 students travelling also, Alex Dalley & Marwan Barakji (Exploits Valley High - Grand Falls) & Gregory Bailey - Gander)

Mark Bennett - Marystown Central High - \$80

### Total: \$910 for Transportation

Prizes:

\$300.00 - Bookstore (t-shirts, water bottles, key chains, clip boards, etc..)

**Accommodations: \$800.00** (students stay on residence, Student Recruitment paid the remaining \$1000.00, total stay: \$1800.00

Total Expenditures: \$2010.00