



October 18, 2005

## 06pims004: Western Canada Linear Algebra Meeting (WCLAM) 2006

### Organizers:

Dale, Olesky, University of Victoria, dolesky@cs.uvic.ca  
Fallat, Shaun, University of Regina, sfallat@math.uregina.ca  
Kharaghani, Hadi , University of Lethbridge, hadi@cs.uleth.ca  
Kirkland, Steve , University of Regina, kirkland@math.uregina.ca  
Lancaster, Peter , University of Calgary, lancaste@ucalgary.ca  
Tsatsomeros, Michael , Washington State University, tsat@math.wsu.edu

### Location:

University of Victoria

### PIMS Sites:

University of Victoria  
University of Calgary

### Objectives:

Linear algebra is a thriving discipline in Western Canada with researchers working in areas that include matrix analysis, combinatorial matrix theory, applied and numerical linear algebra, operator theory and operator algebras. The objectives of WCLAM are to foster research in these and other aspects of linear algebra, and to promote the development of the community of scholars working in the discipline. The primary purpose of WCLAM is to enable researchers (including graduate students and postdocs) from Western Canada to get together to present accounts of their current research, and exchange ideas in an informal setting. The meeting features two or three invited speakers (usually from outside Western Canada) and typically attracts participants from various parts of Canada, the U.S.A. and Europe.

## Comments:

WCLAM is an ongoing sequence of meetings, held roughly every 2 years since 1993. Previous meetings have been held in Regina, Lethbridge, Kananaskis, Victoria and Winnipeg. These meetings have attracted participants from across Canada, as well as from the USA, Europe and Australia. The size and informality of the meetings encourage established researchers to interact with each other as well as with students and postdocs. Advertising and dissemination of information is done electronically, with the program available on the meeting's web page.

## Audience:

This meeting should attract a wide variety of researchers in linear algebra and related disciplines from the PIMS region and elsewhere. We anticipate 35-45 participants, with about half of these giving contributed talks. Students and postdocs will be strongly encouraged to participate and make contributed presentations. Funding has been budgeted to provide partial support for students and postdocs, and registration fees are waived for those participants.

## Participants:

### Invited Speakers:

RICHARD BRUALDI, UWF Beckwith Bascom Professor of Mathematics, Department of Mathematics, University of Wisconsin. (confirmed) An internationally renowned researcher in combinatorics, graph theory, linear algebra, matrix theory and coding theory, with over 200 journal papers and four books published. Holder of several international awards, co-editor-in-chief of Linear Algebra and its Applications and the Electronic Journal of Combinatorics.

VICTOR KLEE, Professor Emeritus, Department of Mathematics, University of Washington, Seattle. (possible speaker) An internationally renowned researcher in the areas of Discrete and Computational Geometry, Classical and Computational Convexity, Combinatorics, Graph Theory, Functional Analysis, and Mathematical Programming and Optimization. He has made significant contributions not only to all of the above fields, but also to mathematics education, mathematical methods in economics and the decision sciences, applications of discrete mathematics in the biological and social sciences, and information linkage between applied mathematics and industry.

MARK LEWIS, Canada Research Chair in Mathematical Biology, Department of Mathematical and Statistical Sciences, University of Alberta. (confirmed) A relatively young, dynamic researcher in mathematical biology, with a focus in spatial ecology. Biological problems

Pacific Institute for the Mathematical Sciences

Central Office and UBC Site Office

1933 West Mall • University of British Columbia • Vancouver • B.C. • V6T 1Z2 • Canada

e/ [pims@pims.math.ca](mailto:pims@pims.math.ca) • w/ [www.pims.math.ca](http://www.pims.math.ca)

t/ 604.822.3922 • f/ 604.822.0883

include modeling the process of territorial pattern formation in wolves, predicting population spread in biological invasions, calculating optimal strategies for biocontrol, and assessing the effect of habitat fragmentation on species survival. A significant part of his research involves the formulation and verification of quantitative models, in collaboration with biologists. His talk will focus on the basic reproductive number in epidemiology and related models. It applies to continuous and discrete-time systems with new results that relate it nicely to some graph theory and linear algebra.

This is the sixth in a sequence of WCLAM meetings. Each of the previous meetings attracted between 30 and 45 participants.

### **Amount Requested:**

6750.00

### **Expenditures:**

#### **a. INVITED SPEAKERS**

Airfare (based on quotes for June 2006) + \$50 ground transportation

Brualdi	\$1050
Klee	\$400
Lewis	\$450

total \$1,900

Accommodation: \$100 /day for 3 days for each speaker, total \$900

Meal allowance: \$50 /day for 3 days for each speaker, total \$450

#### **b. COFFEE BREAKS**

4 catered coffee breaks, total \$400

#### **c. GRAD STUDENT AND POSTDOC SPEAKER SUPPORT**

9 students/pdfs at \$400 each, total \$3,600

**TOTAL EXPENDITURES: \$7250**

### **Income:**

#### **Registration Fees**

25 faculty at \$20 each, total \$500

Fee waived for students and postdocs.

We anticipate some in kind support from the University of Victoria, including meeting rooms and projectors.

## **Selected Dates:**

Fri, June 23, 2006

Sat, June 24, 2006