

Atlantic Association for Research in the Mathematical Sciences
Pacific Institute for the Mathematical Sciences
Memorial University of Newfoundland
Atlantic Algebra Centre
Network of Ontario Lie Theorists

August 12 – 16, 2019

International Workshop

NONASSOCIATIVE ALGEBRAS AND GEOMETRY

Schedule

Bonne Bay Marine Station of Memorial University of Newfoundland

Norris Point, NL

MONDAY, AUGUST 12, 2019

- 9:00 - 9:30 **Opening/Registration**
- 9:30 - 10:20 **Erhard Neher**
University of Ottawa
STEINBERG GROUPS FOR JORDAN PAIRS
- 10:30 - 11:00 **Coffee break**
- 11:00 - 11:50 **Yuly Billig**
Carleton University
REPRESENTATIONS OF LIE ALGEBRAS OF
VECTOR FIELDS ON ALGEBRAIC VARIETIES
- 12:00 - 14:00 **Lunch break**
- 14:00 - 14:50 **Tom Baird**
Memorial University of Newfoundland
E-POLYNOMIALS OF CHARACTER VARIETIES
ASSOCIATED TO A REAL CURVE
- 15:00 - 15:50 **Jörg Feldvoss**
University of South Alabama, USA
LEIBNIZ COHOMOLOGY
- 16:00 - 16:30 **Coffee break**
- 16:30 - 17:00 **Irina Sviridova**
University of Brasilia, Brazil
NIL AND NILPOTENCY PROPERTIES
IN GRADED RINGS
- 17:10 - 17:30 **Adèle Bourgeois**
University of Ottawa
BRUHAT-TITS THEORY FOR THE STRUCTURE
OF REDUCTIVE GROUPS OVER LOCAL FIELDS
- 17:40 - 18:00 **Caio Hornhardt**
Memorial University of Newfoundland
GRADINGS ON SUPERINVOLUTION-SIMPLE
ASSOCIATIVE SUPERALGEBRAS

TUESDAY, AUGUST 13, 2019

- 9:30 - 10:20 **Alberto Elduque**
University of Zaragoza, Spain
GRADED-SIMPLE ALGEBRAS AND LOOP ALGEBRAS
- 10:30 - 11:00 **Coffee break**
- 11:00 - 11:50 **Yuly Billig**
Carleton University
REPRESENTATIONS OF LIE ALGEBRAS OF
VECTOR FIELDS ON ALGEBRAIC VARIETIES
- 12:00 - 14:00 **Lunch break**
- 14:00 - 14:50 **Monica Nevins**
University of Ottawa
BRANCHING RULES AND TYPES FOR
REPRESENTATIONS OF P-ADIC GROUPS
- 15:00 - 15:50 **Cristina Draper Fontanals**
University of Malaga, Spain
DISTINGUISHED AFFINE CONNECTIONS ON
HOMOGENEOUS CONTACT MANIFOLDS
- 16:00 - 16:30 **Coffee break**
- 16:30 - 17:00 **Diogo Diniz Pereira da Silva e Silva**
Federal University of Campina Grande, Brazil
EMBEDDINGS FOR THE JORDAN ALGEBRA
OF A BILINEAR FORM
- 17:10 - 17:30 **Karol Koziol**
University of Alberta
IWAHORI-HECKE ALGEBRAS IN THE (MOD- p)
LOCAL LANGLANDS PROGRAM
- 17:40 - 18:00 **Felipe Yasumura**
State University of Maringá, Brazil
GROUP GRADINGS ON FINITE DIMENSIONAL
INCIDENCE ALGEBRAS

WEDNESDAY, AUGUST 14, 2019

Open Discussion

Boat Tour on Western Brook Pond

Workshop Dinner at 7 p.m.

THURSDAY, AUGUST 15, 2019

- 09:00 - 09:30 **Yuly Billig**
Carleton University
LIEALG MAPLE PACKAGE FOR COMPUTATIONS
IN INFINITE-DIMENSIONAL LIE THEORY
- 9:30 - 10:20 **Ljudmila Sabinina**
Autonomous University of the State of Morelos, Mexico
ON THE BL-ALGEBRAS WITH THE IDENTITY $J(x, y, zt) = 0$
- 10:30 - 11:00 **Coffee break**
- 11:00 - 11:50 **Vyjayanthi Chari**
University of California - Riverside, USA
AN INTRODUCTION TO CLUSTER ALGEBRAS
AND ITS CONNECTIONS WITH GEOMETRY,
COMBINATORICS AND REPRESENTATION THEORY
- 12:00 - 14:00 **Lunch break**
- 14:00 - 14:50 **Plamen Koshlukov**
State University of Campinas, Brazil
GRADINGS ON GRASSMANN ALGEBRAS AND
THEIR GRADED IDENTITIES
- 15:00 - 15:50 **Cristina Draper Fontanals**
University of Malaga, Spain
DISTINGUISHED AFFINE CONNECTIONS ON
HOMOGENEOUS CONTACT MANIFOLDS
- 16:00 - 16:30 **Coffee break**
- 16:30 - 17:00 **Alexei Krasilnikov**
University of Brasilia, Brazil
THE IDENTITIES OF A LIE ALGEBRA VIEWED
AS A LIE RING
- 17:10 - 17:30 **Cameron Ruether**
University of Ottawa
ROST MULTIPLIERS OF LIFTED KRONECKER
TENSOR PRODUCTS
- 17:40 - 18:00 **Abdallah Abdul Karim Shihadeh**
Memorial University of Newfoundland
GRADED MODULES OVER THE SIMPLE LIE ALGEBRA $\mathfrak{sl}_2(\mathbb{C})$

FRIDAY, SEPTEMBER 16, 2019

- 9:30 - 10:20 **Ivan Arzhantsev**
Higher School of Economics, Moscow
ON LIE ALGEBRAS GENERATED BY VERTICAL
LOCALLY NILPOTENT VECTOR FIELDS
- 10:30 - 11:00 **Coffee break**
- 11:00 - 11:50 **Vyjayanthi Chari**
University of California - Riverside, USA
AN INTRODUCTION TO CLUSTER ALGEBRAS
AND ITS CONNECTIONS WITH GEOMETRY,
COMBINATORICS AND REPRESENTATION THEORY
- 12:00 - 14:00 **Lunch break**
- 14:00 - 14:50 **Seidon Alsaody**
University of Alberta
A GEOMETRIC APPROACH TO EXCEPTIONAL
JORDAN ALGEBRAS
- 15:00 - 15:50 **Yorck Sommerhäuser**
Memorial University of Newfoundland
NEW EXAMPLES OF YETTER-DRINFEL'D
HOPF ALGEBRAS
- 16:00 - 16:30 **Coffee break**
- 16:30 - 17:00 **Joanna Meinel**
University of Bonn, Germany
Deutsche Telekom AG
HOCHSCHILD COHOMOLOGY FOR GRADED
ALGEBRAS
- 17:10 - 17:30 **Mitja Mastnak**
Saint Mary's University
FORMAL GRADED DEFORMATIONS AND
CLASSIFICATION OF HOPF ALGEBRAS
- 17:40 - 18:00 **Svea Nora Mierach**
Memorial University of Newfoundland
University of Hamburg, Germany
HOCHSCHILD COHOMOLOGY, MODULAR TENSOR
CATEGORIES AND MAPPING CLASS GROUPS