### KELVIN A. LAGOTA

+1 514 993 2605

E-MAIL: kelz.lagota@gmail.com

#### **EDUCATIONAL BACKGROUND**

2019 Concordia University

Ph. D. Mathematics<sup>1</sup>

Thesis: "Green function and self-adjoint Laplacians on

polyhedral surfaces"

Supervisors: Alexey Kokotov, PhD and Victor Kalvin, PhD

Withdrawn University of the Philippines Diliman

Ph. D. Mathematics (Incomplete, transferred to Concordia U)

2011 University of the Philippines Diliman

M.S. Mathematics

Thesis: "Symmetric Expressions M of order 2n with

Essential Spectrum and Deficiency index d(M)=n+3"

Supervisor: Marian P. Roque, PhD

2008 University of the Philippines Diliman

B.S. Mathematics

2005 Manila Science High School

High School Diploma (Silver Medalist)

#### RESEARCH PUBLICATIONS

A. Kokotov, K. Lagota, Green function and self-adjoint Laplacians on polyhedral surfaces, Canadian Journal of Mathematics, doi: 10.4153/ S0008414X1900033, (2019)

M.P. Roque, G. Limson, K. Lagota, Non Limit-Point Symmetric Differential Expressions with Essential Spectrum, *Matimyas Matematika*, Vol. 30 Nos. 2-3 (2007), pp. 85-93

### PRESENTATIONS IN CONFERENCES AND SYMPOSIA

- > Symmetric Expressions of the Form  $My=(-1)^ny^{(2n)}+(cx^6y^{(4)})^{(4)}-(x^5y^{(1)})^{(1)}+(x^2y^2)^{(4)}$ , (with MP Roque), 2012 MSP<sup>2</sup> Annual Convention, De La Salle Lipa, Lipa City, Batangas, PHILIPPINES, May 2012
- > Symmetric Expressions M of order 2n with Essential Spectrum and Deficiency Index n+3, (with MP Roque), The 6th SEAMS-GMU<sup>3</sup> International Conference on Mathematics and Its Applications, Universitas Gadjah Mada, Yogyakarta, INDONESIA, 12-15 July 2011
- > Symmetric Expressions of the Form  $My=(-1)^ny^{(2n)}+(cx^2y')'$ , (with MP Roque), 2011 MSP Annual Convention, University of Santo Tomas, Manila, PHILIPPINES, May 2011

<sup>&</sup>lt;sup>1</sup> All the requirements for the degree have been submitted. The Faculty Council, the Council of the School of Graduate Studies, and the Senate of the University will convene on May 2020 to approve the graduation.

<sup>&</sup>lt;sup>2</sup> Mathematical Society of the Philippines

<sup>&</sup>lt;sup>3</sup> Southeast Asian Mathematical Society – Gadjah Mada University

> Symmetric Expressions of order 2n with Essential Spectrum and Deficiency Index n+3, (with MP Roque), 2009 MSP Annual Convention, Limketkai, Cagayan De Oro, Misamis Oriental, PHILIPPINES, May 2009

### SEMINARS, WORKSHOPS, AND SCHOOLS ATTENDED

- ➤ 2016 CRM Summer School on Spectral theory and applications, Laval University, Quebec, Canada, 4 14 July 2016
- ➤ CIMPA-NIMS<sup>4</sup> Research School on dynamical systems: Examples, billiards and the 3-body problems, Center for Applications of Mathematical Principle, Daejeon, South Korea, 25 May 3 June 2015
- <sup>5</sup>CIMPA-ICIAM-IMU-CDC-Philippines Research School 2014: Partial Differential Equations: Analysis, Numerics, and Applications to Flood and Tsunamis, Institute of Mathematics, University of the Philippines Diliman, 23 June 4 July 2014
- > SEAMS Manila School on the Applications of Algebra and Analysis, Institute of Mathematics UP Diliman, 4-15 April 2011

#### **WORK EXPERIENCES**

# Mathematics Department, Dawson College Faculty (Continuing Education)

- Summer 2019
  - o Linear Algebra (Social Science) 201-105-DW
  - o Calculus 1 (Social Science) 201-103-DW
- Winter 2019
  - o Calculus 2 (Science) 201-NYB-05
- Fall 2018
  - Calculus 1 (Social Sciences/Commerce) 201-103-DW
  - o Remedial Activities for Secondary IV Math 201-016-50
- Winter 2018
  - Linear Algebra (Science) 201-NYC-05
  - Business Mathematics 201-801-DW

### Department of Mathematics & Statistics, Concordia University Grad Student Instructor, Teaching Assistant

- Winter 2019
  - o Class Tutor (Algebra and Functions, Differential and Integral Calc 1)
  - Tutor (Math Help Center)
  - Marker (Linear Algebra and Applications II)
- Fall 2018
  - Teaching Assistant (Fundamental Concepts of Algebra)
- Winter 2018
  - Class Tutor (Differential and Integral Calculus 1)
  - Tutor (Math Help Center)
  - Marker (Mathematical Modeling)
- Fall 2017
  - Lecturer (Differential and Integral Calculus 2)
- Winter 2017

<sup>&</sup>lt;sup>4</sup> Centre International de Mathematiques Pures et Appliquees – National Institute for Mathematical Sciences

<sup>&</sup>lt;sup>5</sup> http://www.cimpa-icpam.org/IMG/pdf/manila%202014\_mr.pdf

- Lecturer (Algebra and Functions)
- Fall 2016
  - Lecturer (Differential and Integral Calculus 2)
- Summer 2016
  - Class Tutor (Differential and Integral Calculus 2)
- Winter 2016
  - Lecturer (Differential and Integral Calculus 2)
- Fall 2015
  - Class Tutor (Differential and Integral Calculus 2)
  - Marker (Complex Analysis 1, Differential Equations)

### Institute of Mathematics, University of the Philippines Diliman Instructor

• Oct 2011 – July 2015 Instructor 7

• Nov 2008 - Oct 2011 Instructor 1

Math 53 (Elementary Analysis 1) Coordinator, 2<sup>nd</sup> Semester AY 09-10 Courses taught: Algebra and Trigonometry; Elementary Analysis 1, 2, and 3; Calculus 1, 2, and 3; Differential Equations and Applications

## College of Science, University of the Philippines Diliman Coordinator, National Service Training Program (NSTP)

• June 2011 - July 2015

### OTHER ACTIVITIES AND APPOINTMENTS

- > Assistant Director, 14th Philippine Mathematical Olympiad
- Member, College of Science-NSTP Committee (2010-2015)
- ➤ Member, UPD-NSTP Executive Committee (2011-2015)
- Member of the local organizing committees of CIMPA School in Manila (2014) and SEAMS School in Manila (2011)
- Volunteer mentor at Diliman Learning Resource Center, UPD (2006-2008)