KELVIN A. LAGOTA
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EDUCATIONAL BACKGROUND

2015-2019   **Ph.D. Mathematics**
Concordia University
Thesis: "*Green function and self-adjoint Laplacians on polyhedral surfaces*"
Supervisors: Alexey Kokotov, PhD and Victor Kalvin, PhD

2011-2015   **Ph.D. Mathematics** (Withdrawn, transferred to Concordia U)
University of the Philippines Diliman

2008-2011   **M.S. Mathematics**
University of the Philippines Diliman
Thesis: "*Symmetric Expressions M of order 2n with Essential Spectrum and Deficiency index d(M)=n+3*"
Supervisor: Marian P. Roque, PhD

2005-2008   **B.S. Mathematics**
University of the Philippines Diliman
Undergraduate Research: "On Approximation by Polynomials: The Weierstrass Approximation Theorem"
Supervisor: Marian P. Roque, PhD

RESEARCH PUBLICATIONS

- A. Kokotov, K. Lagota*, Green function and self-adjoint Laplacians on polyhedral surfaces, Canadian Journal of Mathematics*, Vol. 72(5), (2020), pp. 1324-1351. doi: 10.4153/ S0008414X1900033
- K. Lagota, On the domain of the adjoint Laplacian on a compact Riemann surface with conical singularities, *Matimyas Matematika*, Vol. 43, No. 1, (2020), pp.1-18.
- 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 $My=(-1)^n y^{(2n)} + (cx^6 y^{(4)})^{(4)} - (x^5 y''')''' + (x^2 y')'$*, (with MP Roque), *2012 MSP[1] 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[2] International Conference on Mathematics and Its Applications,* Universitas Gadjah Mada, Yogyakarta, INDONESIA, 12-15 July 2011
- *Symmetric Expressions of the Form $My=(-1)^n y^{(2n)} + (cx^2 y')'$*, (with MP Roque), *2011 MSP Annual Convention*, University of Santo Tomas, Manila, PHILIPPINES, May 2011

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[1] Mathematical Society of the Philippines
[2] 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

WORK EXPERIENCES

Institute of Mathematics, University of the Philippines Diliman
Senior Lecturer **(part-time, equivalent to Assistant Professor)**
- *Second Semester, 2020-2021*
  - Math 22: Elementary Analysis 2 (remote teaching, 2 sections)

Mathematics Department, Dawson College
Faculty **(Continuing Education)**
- *Winter 2021*
  - Linear Algebra (Science) 201-NYC-05 (delivered online)
  - Remedial Activities for Secondary IV Math 201-801-DW (delivered online, 2 sections)
- *Fall 2020*
  - Linear Algebra (Science) 201-NYC-05 (delivered online)
  - Business Mathematics 201-801-DW (delivered online)
- *Summer 2019*
  - Linear Algebra (Social Science) 201-105-DW
  - Calculus 1 (Social Science) 201-103-DW
- *Winter 2019*
  - Calculus 2 (Science) 201-NYB-05
- *Fall 2018*
  - Calculus 1 (Social Sciences/Commerce) 201-103-DW
  - 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*
  - 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) (online)
- *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*
  - 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, 2nd Semester AY 09-10
  Co-Author/Co-Editor of Math 53 Module 1st Edition
  Courses taught:
  - Trigonometry – 1x
  - Algebra and Trigonometry – 5x
  - Elementary Analysis 1 – 10x
  - Elementary Analysis 2 – 6x
  - Elementary Analysis 3 – 2x
  - Precalculus – 3x
  - Calculus 1 – 5x
  - Calculus 2 – 3x
  - Calculus 3 – 1x
  - Differential Equations and Applications – 6x
  - Undergraduate Research – 1x

College of Science, University of the Philippines Diliman
Coordinator, **National Service Training Program (NSTP)**
- June 2011 – July 2015

SEMINARS, WORKSHOPS, AND SCHOOLS ATTENDED
- *2016 CRM Summer School on Spectral theory and applications*, Laval University, Quebec, Canada, 4 – 14 July 2016
- *CIMPA-NIMS[3] 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
- [4]*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

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)

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[3] Centre International de Mathematiques Pures et Appliquees – National Institute for Mathematical Sciences
[4] http://www.cimpa-icpam.org/IMG/pdf/manila%202014_mr.pdf