Available Supervisors (September 2027)

GRADUATE PROGRAM IN MATHEMATICS & STATISTICS

Potential supervisors for PhD students in September 2027

Last Name	First Name	Email	Research area(s)
Bergeron	Nantel	bergeron@yorku.ca	Algebraic combinatorics related to algebraic geometry, representation theory, Hopf algebra and the like
Cao	Jingyi	jingyic@yorku.ca	Stochastic optimal control in investment and insurance
Chan	Ada	ssachan@yorku.ca	Algebraic graph theory, quantum walks
Chen	Michael	chensy@yorku.ca	AI, Optimization; Financial Engineering; public healthcare
Couchman	Miles	mmpc@yorku.ca	Fluid mechanics, dynamical systems, mathematical modelling
Diaz-Rodriguez	Jairo	jdiazrod@yorku.ca	Data science, Machine Learning, Large Language Models, High dimensional statistics
Farah	Ilijas	ifarah@yorku.ca	Set theory, operator algebras, model theory
Furman	Ed	efurman@yorku.ca	Actuarial Science, Quantitative Risk Management, Stochastic Dependence Modelling
Gao	Xin	xingao@yorku.ca	Statistics, machine learning and AI
Guan	Tianyu	tguan@yorku.ca	Sports analytics, functional data analysis, machine learning, and deep learning
Gibson	Peter	pcgibson@yorku.ca	Analysis and applications, Inverse problems, One-dimensional scattering in non-smooth media, Acoustic imaging, Computational methods, Orthogonal polynomials, Combinatorial and differential geometry, Complex analysis

Last Name	First Name	Email	Research area(s)
Haslam	Michael	mchaslam@yorku.ca	Fluid Mechanics (bio fluids, Navier Stokes), Scientific Computing and Algorithms
Heffernan	Jane	jmheffer@yorku.ca	Mathematical Biology, Disease Modelling, Dynamical Systems, Stochastic Models
Ingram	Patrick	pingram@yorku.ca	Number theory, complex dynamics, arithmetic dynamics, elliptic curves, cryptography
Ku	Hyejin	hku@yorku.ca	Mathematical Finance, Machine Learning, Reinforcement Learning
Jankowski	Hanna	hkj@yorku.ca	Statistics and applications. Recent student projects include nonparametric methods to recover a density from discretized data, LLMs with applications to bioinformatics, quantum cognition ML (upcoming)
Li	Dongchen	dcli@yorku.ca	Actuarial Science, Mathematical Finance, Stochastic Optimal Control
Liang	Dong	dliang@yorku.ca	Numerical analysis for PDEs, Scientific computing and Computational optimization, Computational fluid dynamics and Porous media flow, Computational electromagnetics
Liu	Yi	yliu42@yorku.ca	Differential Privacy, Machine Learning, Large Language Model
Madras	Neal	madras@yorku.ca	Probability, discrete statistical physics, lattice models of polymer molecules, discrete mathematics; co-supervision in disease modelling only
Moghadas	Seyed	moghadas@yorku.ca	Computational epidemiology; AI-based modelling of infectious disease
Monette	Georges	georges@yorku.ca	Multilevel and longitudinal models, Statistical visualization, Applications to recovery from traumatic brain injuries; available for co-supervision only

Last Name	First Name	Email	Research area(s)
Motakis	Pavlos	pmotakis@yorku.ca	Functional analysis, Banach space theory, operator theory
Moyles	Iain	imoyles@yorku.ca	Mathematical modelling, asymptotic analysis, scientific computing, mathematical biology, electrochemistry, ecology
Ramsay	Kelly	kramsay2@yorku.ca	Differential privacy, Machine learning, Functional data, Robust statistics
Sharma	Divya	divya03@yorku.ca	Machine Learning, Deep Learning, Reinforcement Learning, Generative AI, Biostatistics, AI for healthcare
Skoufranis	Paul	pskoufra@yorku.ca	Operator Algebras, Free Probability, Operator Theory, Functional Analysis
Szeptycki	Paul	szeptyck@yorku.ca	Set theoretic topology
Woldegerima	Woldegebriel Assefa	wassefaw@yorku.ca	Epidemiology-informed Neural Networks, Within-host modelling, Multi-time scale modeling, Applied differential equations in Biology and Chemistry (ODE, PDE, discrete models)
Wong	Augustine	august@yorku.ca	Statistics
Wong	Man Wah	mwwong@yorku.ca	Pseudo-Differential Operators, Partial Differential Equations, Functional Analysis
Wu	Jianhong	wujh@yorku.ca	Dynamical systems, mathematical biology, neural networks, data analytics
Wu	Yuehua	wuyh@yorku.ca	Model selection, Multiple change-point analysis, High-dimensional statistics, Machine learning, Spatio-temporal modelling, Robust statistics, Financial econometrics, Computational algorithms, Functional data modelling
Zabrocki	Mike	zabrocki@yorku.ca	Algebraic combinatorics and combinatorial representation theory

Last Name	First Name	Email	Research area(s)
Zhao	Kaiqiong	kaiqiong@yorku.ca	Biostatistics: high-dimensional modeling, genomic and epigenomic data analysis, modern causal inference
Zhu	Huaiping	huaiping@yorku.ca	Bifurcation theory, dynamical systems, mathematical biology, infectious disease modelling, climate change impacts

Potential supervisors for MA students (seminar, survey paper, or thesis) in September 2027

Last Name	First Name	Email	Research area(s)
Bergeron	Nantel	bergeron@yorku.ca	Algebraic combinatorics related to algebraic geometry, representation theory, Hopf algebra and the like
Cao	Jingyi	jingyic@yorku.ca	Stochastic optimal control in investment and insurance
Chan	Ada	ssachan@yorku.ca	Algebraic graph theory, quantum walks
Chen	Michael	chensy@yorku.ca	AI, Optimization; Financial Engineering; public healthcare
Couchman	Miles	mmpc@yorku.ca	Fluid mechanics, dynamical systems, mathematical modelling
Diaz-Rodriguez	Jairo	jdiazrod@yorku.ca	Data science, Machine Learning, Large Language Models, High dimensional statistics
Farah	Ilijas	ifarah@yorku.ca	Set theory, operator algebras, model theory
Fu	Yuejiao	yuejiao@yorku.ca	Finite Mixture Models, Empirical Likelihood Method, Asymptotic Theory, Biostatistics, Case-Control Studies, Statistical Genetics, DNA Methylation Data Analysis, Density Ratio Models, Data Depth
Furman	Ed	efurman@yorku.ca	Actuarial Science, Quantitative Risk Management, Stochastic Dependence Modelling
Guan	Tianyu	tguan@yorku.ca	Sports analytics, functional data analysis, machine learning, and deep learning
Heffernan	Jane	jmheffer@yorku.ca	Mathematical Biology, Disease Modelling, Dynamical Systems, Stochastic Models
Ingram	Patrick	pingram@yorku.ca	Number theory, complex dynamics, arithmetic dynamics, elliptic curves, cryptography

Last Name	First Name	Email	Research area(s)
Jankowski	Hanna	hkj@yorku.ca	Statistics and applications. Recent student projects include nonparametric methods to recover a density from discretized data, LLMs with applications to bioinformatics, quantum cognition ML (upcoming)
Janse van Rensburg	EJ	rensburg@yorku.ca	Monte Carlo simulations of self-avoiding walks, Statistical mechanics of lattice models in physics and chemistry, Mathematical physics and combinatorics of lattice paths and related models
Ku	Hyejin	hku@yorku.ca	Mathematical Finance, Machine Learning, Reinforcement Learning
Kuznetsov	Alexey	akuznets@yorku.ca	Stochastic processes, special functions, computational mathematics, financial and actuarial mathematics
Li	Dongchen	dcli@yorku.ca	Actuarial Science, Mathematical Finance, Stochastic Optimal Control
Liang	Dong	dliang@yorku.ca	Numerical analysis for PDEs, Scientific computing and Computational optimization, Computational fluid dynamics and Porous media flow, Computational electromagnetics
Liu	Wei	liuwei@yorku.ca	Longitudinal data analysis and missing data
Liu	Yi	yliu42@yorku.ca	Differential Privacy, Machine Learning, Large Language Model
Madras	Neal	madras@yorku.ca	Probability, discrete statistical physics, lattice models of polymer molecules, discrete mathematics; co-supervision in disease modelling only
Monette	Georges	georges@yorku.ca	Multilevel and longitudinal models, Statistical visualization, Applications to recovery from traumatic brain injuries; available for co-supervision only

Last Name	First Name	Email	Research area(s)
Moyles	Iain	imoyles@yorku.ca	Mathematical modelling, asymptotic analysis, scientific computing, mathematical biology, electrochemistry, ecology
Motakis	Pavlos	pmotakis@yorku.ca	Functional analysis, Banach space theory, operator theory
Omar	Mohamed	omarmo@yorku.ca	Combinatorics, Discrete Mathematics, Algebraic Combinatorics, Graph Theory
Ramsay	Kelly	kramsay2@yorku.ca	Differential privacy, Machine learning, Functional data, Robust statistics
Salisbury	Tom	salt@yorku.ca	Co-supervision in Probability and Stochastic Processes; supervision for MA survey/FE projects in Finance and Actuarial Science
Sharma	Divya	divya03@yorku.ca	Machine Learning, Deep Learning, Reinforcement Learning, Generative AI, Biostatistics, AI for healthcare
Skoufranis	Paul	pskoufra@yorku.ca	Operator Algebras, Free Probability, Operator Theory, Functional Analysis
Szeptycki	Paul	szeptyck@yorku.ca	Set theoretic topology
Woldegerima	Woldegebriel Assefa	wassefaw@yorku.ca	Epidemiology-informed Neural Networks, Within-host modelling, Multi-time scale modeling, Applied differential equations in Biology and Chemistry (ODE, PDE, discrete models)
Wong	Augustine	august@yorku.ca	Statistics
Wu	Jianhong	wujh@yorku.ca	Dynamical systems, mathematical biology, neural networks, data analytics
Wu	Yuehua	wuyh@yorku.ca	Model selection, Multiple change-point analysis, High-dimensional statistics, Machine learning, Spatio-temporal modelling, Robust statistics, Financial econometrics, Computational algorithms, Functional data modelling

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Zabrocki	Mike	zabrocki@yorku.ca	Algebraic combinatorics and combinatorial representation theory
Zhao	Kaiqiong	kaiqiong@yorku.ca	Biostatistics: high-dimensional modeling, genomic and epigenomic data analysis, modern causal inference
Zhu	Huaiping	huaiping@yorku.ca	Bifurcation theory, dynamical systems, mathematical biology, infectious disease modelling, climate change impacts

Potential supervisors for MSc students in September 2027

[MSc program is offered only in Applied and Industrial Mathematics]

Last Name	First Name	Email	Research area(s)
Cao	Jingyi	jingyic@yorku.ca	Stochastic optimal control in investment and insurance
Chen	Michael	chensy@yorku.ca	AI, Optimization; Financial Engineering; public healthcare
Couchman	Miles	mmpc@yorku.ca	Fluid mechanics, dynamical systems, mathematical modelling
Diaz-Rodriguez	Jairo	jdiazrod@yorku.ca	Data science, Machine Learning, Large Language Models, High dimensional statistics
Farah	Ilijas	Ifarah@yorku.ca	Set theory, operator algebras, model theory
Furman	Ed	efurman@yorku.ca	Actuarial Science, Quantitative Risk Management, Stochastic Dependence Modelling
Heffernan	Jane	jmheffer@yorku.ca	Mathematical Biology, Disease Modelling, Dynamical Systems, Stochastic Models
Ingram	Patrick	pingram@yorku.ca	Number theory, complex dynamics, arithmetic dynamics, elliptic curves, cryptography
Jankowski	Hanna	hkj@yorku.ca	Statistics and applications. Recent student projects include nonparametric methods to recover a density from discretized data, LLMs with applications to bioinformatics, quantum cognition ML (upcoming)
Janse van Rensburg	EJ	rensburg@yorku.ca	Monte Carlo simulations of self-avoiding walks, Statistical mechanics of lattice models in physics and chemistry, Mathematical physics and combinatorics of lattice paths and related models

Last Name	First Name	Email	Research area(s)
Li	Dongchen	dcli@yorku.ca	Actuarial Science, Mathematical Finance, Stochastic Optimal Control
Liang	Dong	dliang@yorku.ca	Numerical analysis for PDEs, Scientific computing and Computational optimization, Computational fluid dynamics and Porous media flow, Computational electromagnetics
Liu	Yi	yliu42@yorku.ca	Differential Privacy, Machine Learning, Large Language Model
Madras	Neal	madras@yorku.ca	Probability, discrete statistical physics, lattice models of polymer molecules, discrete mathematics; co-supervision in disease modelling only
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Omar	Mohamed	omarmo@yorku.ca	Combinatorics, Discrete Mathematics, Algebraic Combinatorics, Graph Theory
Ramsay	Kelly	kramsay2@yorku.ca	Differential privacy, Machine learning, Functional data, Robust statistics
Sharma	Divya	divya03@yorku.ca	Machine Learning, Deep Learning, Reinforcement Learning, Generative AI, Biostatistics, AI for healthcare
Woldegerima	Woldegebriel Assefa	wassefaw@yorku.ca	Epidemiology-informed Neural Networks, Within-host modelling, Multi-time scale modeling, Applied differential equations in Biology and Chemistry (ODE, PDE, discrete models)

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Wu	Jianhong	wujh@yorku.ca	Dynamical systems, mathematical biology, neural networks, data analytics
Zhao	Kaiqiong	kaiqiong@yorku.ca	Biostatistics: high-dimensional modeling, genomic and epigenomic data analysis, modern causal inference
Zhu	Hongmei	hmzhu@yorku.ca	Time-frequency Analysis, Wave Analysis, Numerical Computations, Applications in Medicine and Industry
Zhu	Huaiping	huaiping@yorku.ca	Bifurcation theory, dynamical systems, mathematical biology, infectious disease modelling, climate change impacts