



University of Colorado
Boulder

**Department of Mathematics
Graduation Ceremony
May 16, 2020**

**Dr. Alexander Gorokhovsky
Department Chair**

**Dr. Sergei Kuznetsov
Graduate Chair**

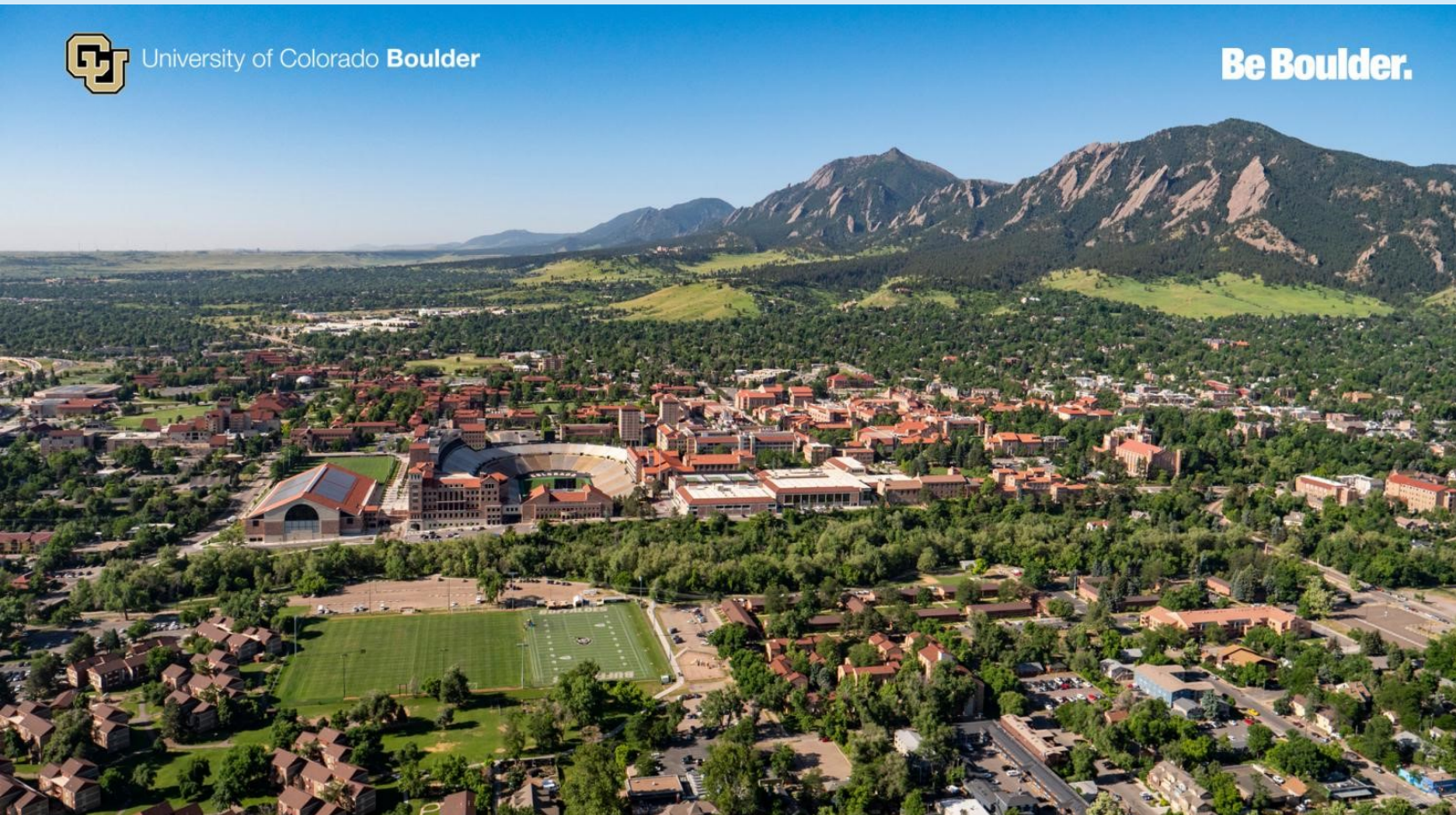
**Dr. Nathaniel Thiem
Undergraduate Chair**

Alma Mater

Hail, and hail our Alma Mater!
Ever will our hearts be true:
You will live with us forever,
Loyal we will be to you.
We will sing forever your praises,
Ever more our love renew,
Pledge our whole devotion to you.
Dear old CU!



Be Boulder.



This is the unofficial program of the May 2020 Commencement Exercises.

The official program will be archived in August 2020



Ceremony Order

Welcome Address

Dr. Alexander Gorokhovsky
Department Chair

Keynote Address

Dr. Kent Goodrich
CU Boulder Professor
Emeritus

Address to PhD Students

Dr. Sergei Kuznetsov
Graduate Chair

Presentation of PhD and
Concurrent Masters Students

Advising Faculty

Address to Baccalaureate
Students

Dr. Nathaniel Thiem
Undergraduate Chair

Presentation of Baccalaureate
Students Receiving Honors in
Mathematics

Tiffany Dowd

Presentation of Baccalaureate
Students

Tiffany Dowd

Closing Remarks & Moving
Tassels

Dr. Alexander Gorokhovsky
Department Chair



Dr. Kent Goodrich

CU Boulder Mathematics Professor Emeritus

Keynote Speaker

PhD awarded in 1966 from the University of Utah and started teaching mathematics at CU Boulder in Fall 1966 and retired at the end of 2010. Won several teaching awards while at CU.

Visiting Scientist at NCAR from 1985 until 2013. At NCAR worked on wind shear, turbulence and icing algorithms related to air safety (*of note; the team he worked with at NCAR on turbulence was cited as one of 50 outstanding scientific achievements by Scientific American in 2003*).

A Casual Scientist until the present. Produced eleven PhD students while at CU.

Loved every minute of it.



Graduate Degrees in Mathematics



PhD in Mathematics

University of Colorado Boulder

Katharine Lauren Marie Adamyk, PhD
Graduate Advisor: Dr. Agnès Beaudry
Dissertation Title: *A classification of Q_0 -local $A(1)$ -modules*

Sebastian Bozlee, PhD
Graduate Advisor: Dr. Jonathan Wise
Dissertation Title: *An Application of Logarithmic Geometry to Moduli of Curves of Genus Greater Than One*

Andrew Scott Healy, PhD
Graduate Advisor: Dr. Alexander Gorokhovsky
Dissertation Title: *Explicit Quasi-Isomorphisms Between the Koszul and Bar Resolutions of Weyl Algebras*

Trevor Jack, PhD
Graduate Advisor: Dr. Peter Mayr
Dissertation Title: *Computational complexity of semigroup properties*

Saeed Khalili, PhD
Graduate Advisor: Dr. Yu-Jui Huang
Co-Advisor: Dr. Sergei Kuznetsov
Dissertation Title: *Stochastic Analysis for Problems in Mathematical Finance and Economics*

Taylor Joseph Klotz, PhD

Graduate Advisor: Dr. Jeanne Clelland

Dissertation Title: *Geometry of cascade feedback linearizable control systems*

Daniel Everett Martin, PhD

Graduate Advisor: Dr. Katherine Stange

Dissertation Title: *The geometry of imaginary quadratic fields*

Caroline Liggett Matson, PhD

Graduate Advisor: Dr. David Grant

Dissertation Title: *Multidimensional formal group laws with complex multiplication*

Mark Pullins, PhD

Graduate Advisor: Dr. Keith Kearnes

Dissertation Title: *Generically 2-transitive algebraic group actions with solvable point stabilizers*

Tyler Schrock, PhD

Graduate Advisor: Dr. Nathaniel Thieme

Co-Advisors: Dr. Josh Grochow, Dr. Rafael Frongillo

Dissertation Title: *On the complexity of isomorphism in finite group theory and symbolic dynamics*

Hanson William Smith, PhD

Graduate Advisor: Dr. Katherine Stange

Dissertation Title: *Monogeneity and Torsion*

Athena Crystine Sparks, PhD

Graduate Advisor: Dr. Peter Mayr

Dissertation Title: *Clonoids and Promise Constraint Satisfaction Problems*

Zhenhua Wang, PhD

Graduate Advisor: Dr. Janos Englander

Co-Advisor: Dr. Yu-Jui Huang

Dissertation Title: *Random processes and Stochastic Control*



Masters in Mathematics

University of Colorado Boulder

Andrew James Campbell, MA
Graduate Advisor: Dr. Sean O'Rourke

Andre Davis, MA
Graduate Advisor: Dr. Agnès Beaudry

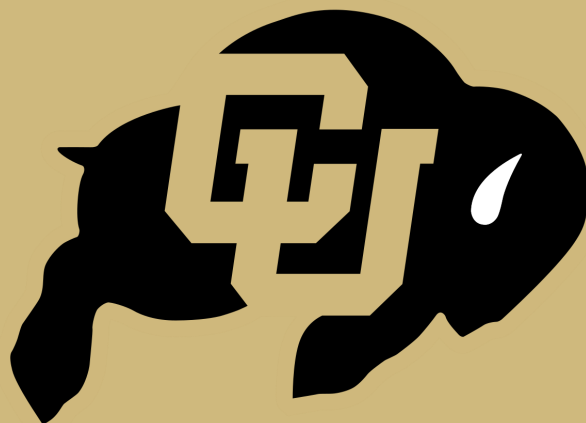
Sangman Lee, MA
Graduate Advisor: Peter Mayr and Dr. Rafael Frongillo

Ali Lotfi, MA
Graduate Advisor: Dr. Keith Kearnes

Jonathan Randall Quartin, MA
Graduate Advisor: Dr. Jonathan Wise

James VanMeter, MA
Graduate Advisor: Dr. Judith Packer

Patrick Michael Wynne, MA
Graduate Advisor: Dr. Peter Mayr



Concurrent Degrees in Mathematics

University of Colorado Boulder

Brandon Breeden, BA/MS

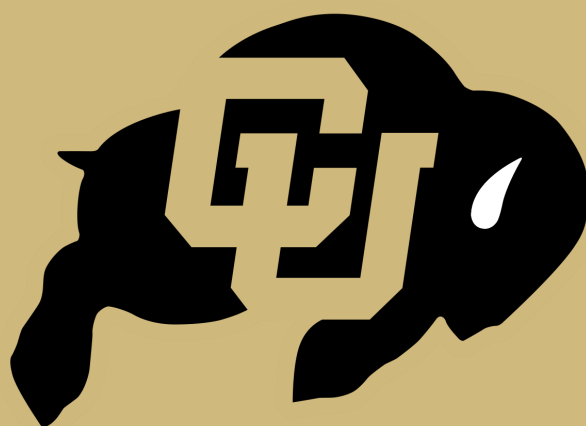
Advisors: Dr. Laila Andersson, LASP, Dr. Agnès Beaudry, MATH

Project Title: *Ion Motion Effects on Langmuir Probe Theory*

Xiaoliu Chen, BA/MA

Graduate Advisor: Dr. Janos Englander

Project Title: *A surprising Poisson process arising from a species competition model by Durrett and Limic*



I am a Math Buff.



Baccalaureate Degrees in Mathematics



Honors in Mathematics

University of Colorado Boulder

Jerett Charles Cherry: *summa cum laude* in Mathematics

Advisor: Dr. Sebastian Casalaina-Martin

Thesis Title: *A compendium of Riemann surfaces and algebraic curves*

Megan Hannah Collins: *summa cum laude* in Mathematics

Advisor: Dr. Sean O'Rourke

Thesis Title: *Distribution of Critical Values of Random Polynomials with Non-iid Roots*

Ram Diego Ekstrom: *summa cum laude* in Mathematics

Advisor: Dr. Magdalena Czubak

Thesis Title: *Survey of the theory of Fourier transforms on R^n , H^2 , and homogeneous spaces of semisimple Lie groups*

Henry Charles Fontana: *cum laude* in Mathematics

Advisor: Dr. Sebastian Casalaina-Martin

Thesis Title: *Hodge theory, almost complex structures, and the Lefschetz decomposition*

Ryan Andrew Mike: *summa cum laude* in Mathematics

Advisor: Dr. Sebastian Casalaina-Martin

Thesis Title: *An introduction to sheaf cohomology in algebraic geometry*

Poramate Nakkirt: *magna cum laude* in Mathematics

Advisor: Dr. Sean O'Rourke

Thesis Title: *Limiting Moments of the Eigenvalue Distribution of the Watts–Strogatz Random Graph*

December 2019 Baccalaureate
Degrees in Mathematics
University of Colorado Boulder

Nicholas Drew Bossenbroek ★ π

Jerett Charles Cherry * ★ π

Kyla Michelle Dyer

Audrianna Elsa Fabrizio

Jason Michael Giblin π

Devin Jonathan Haugh

Yichun Hong

Aaron Song You Hong

Briana Gaojoua Lo

Josef L. Los

Xiaoyi Ma

Michelle Laura MacLennan π

Sean Michael McDonough

David Cullen McHale

Keegan Patrick McNamara ★ π

Togtuun Munkhtsetseg

Poramate Nakkirt ** ★ π

Bryan Charles Nelson

Nicholas Vincent Noone

Lu Ouyang

** Mathematics Honors: summa cum laude*

*** Mathematics Honors: magna cum laude*

**** Mathematics Honors: cum laude*

★ “with distinction”

π Pi Mu Epsilon Math Honor's Society

December 2019 Baccalaureate
Degrees in Mathematics
University of Colorado Boulder

Jared Popowski π
Kellen Richard Rice π
Hannah Jean Rieder ★ π
Noah Chase Rosenthal
Erica A. Schmisser
Yiting Song
Christopher Irving Thomson
Benjamin Reid Wilking
Richard Williams
Dongyu Wu
Yujing Xie
Bohao Zhang

* *Mathematics Honors: summa cum laude*
** *Mathematics Honors: magna cum laude*
*** *Mathematics Honors: cum laude*
★ *“with distinction”*
 π *Pi Mu Epsilon Math Honor's Society*

May and August 2020 Baccalaureate Degree Candidates in Mathematics University of Colorado Boulder

Hamad Nawaf Al Mutawa
Abdullatif Khalid AlAbduljaleel
Zade K. Alfalah
Travis Almquist
Munther Alnghemshi
Riccardo Arossa
Courtney Beckwith
Crossland Joseph Beer ★ π
Susan Edith Born ★ π
Jonathan Micah Bosnich ★ π
Brandon Breeden
Anthony Maurel Carroll ★ π
Xiaoliu Chen ★ π
Alexandra Marie Collard ★
Megan Hannah Collins * ★ π
Clifford Stephen Craw
Connor DeFilippis
Guofeng Deng
Kyle Matthew DiGiacomo
Joseph Williams Director

* *Mathematics Honors: summa cum laude*

** *Mathematics Honors: magna cum laude*

*** *Mathematics Honors: cum laude*

★ *“with distinction”*

π *Pi Mu Epsilon Math Honor's Society*

**May and August 2020 Baccalaureate
Degree Candidates in Mathematics
University of Colorado Boulder**

Natalie Downey
Justin Thomas Eggers
Ram Diego Ekstrom * ★ π
Henry Charles Fontana ***
Reilly Griffin Friedman
James William McInnes Gallmeister
Sergey Gitalov ★ π
Shang Gong
Alexa Graffeo
Braden Thomas Griebel ★ π
Briana Jo Hackos ★ π
Cameron Forrest Hamblen
Marcus Philip Haverhals
Jason Linnebjerg Haw π
Yunpeng He
Kevin Charles Headrick ★ π
Daryn Kenji Higaki
Siyuan Huang
Jeffrey Huynh
Landon Robert Jacquinot

* *Mathematics Honors: summa cum laude*
** *Mathematics Honors: magna cum laude*
*** *Mathematics Honors: cum laude*
★ *"with distinction"*
 π *Pi Mu Epsilon Math Honor's Society*

**May and August 2020 Baccalaureate
Degree Candidates in Mathematics
University of Colorado Boulder**

Michael Devonn Jara

Shaohan Ji

Peng Jiang

Alexander Matthew Koek

Mark Robinette La Rocque

Lauren Jean Lamb

Ngawang Lekden

Henry William Lembeck

Naerduo Li

Ruolin Li

Derek James Logan

Tyler Dale Jagger Lovrien

Yadi Ma

Josiah Edward Martinez

Cortland Rhea McHale

Liam Richard David Merz Hoffmeister π

Ryan Andrew Mike * ★ π

Destry James Monk

Brandon Cole Montalvo

Eric Mathieu Morin

** Mathematics Honors: summa cum laude*

*** Mathematics Honors: magna cum laude*

**** Mathematics Honors: cum laude*

★ "with distinction"

π Pi Mu Epsilon Math Honor's Society

May and August 2020 Baccalaureate Degree Candidates in Mathematics University of Colorado Boulder

Blanca Muñoz Pérez

Megan Elizabeth Nelson ★ π

Michael Herbert Neuder ★

Justin Nicoski ★ π

Emmett Nolan Nielsen

Victoria Kathryn Orta

Tianxiang Ouyang

Simon D. Pasillas π

Joshua Paup

Arthur Charles Denis Pellegrino ★ π

Connor Ries Plooy ★ π

Jonathan Michael Powell

Ce Qiu

Adam Edward Reichenbach

Zhao Yuan Ren

Dante Antonio Salas π

Paul Schmidt

Alexandra Hope Schwein ★ π

Lucas James Simon

Erin Isabella Smith ★ π

** Mathematics Honors: summa cum laude*

*** Mathematics Honors: magna cum laude*

**** Mathematics Honors: cum laude*

★ "with distinction"

π Pi Mu Epsilon Math Honor's Society

**May and August 2020 Baccalaureate
Degree Candidates in Mathematics
University of Colorado Boulder**

Yarrow J. Sullivan
Jade VanAusdall π
John Randel Vander Dussen
Fernando Villalobos
Chaitanya P. Walia
Megan Elizabeth Walters π
Yongdi Wei
Manru Wei
Alison Michelle Weinberger $\star \pi$
Megan Grace Wettstein $\star \pi$
Benjamin Wilder
Maxwell Grimes Williams
Chen Wu
Luoying Zhang
Qingyu Zhang
Kaiyuan Zhang
Miao Zhang
Su Zhang
Kexin Zhu
Maximilian Julius Zim

** Mathematics Honors: summa cum laude*
*** Mathematics Honors: magna cum laude*
**** Mathematics Honors: cum laude*
 \star "with distinction"
 π Pi Mu Epsilon Math Honor's Society



YOU DID IT!





Mathematics Awards and Scholarships

Burton W. Jones Teaching Excellence Award

- Katharine Lauren Marie Adamyk - 2018
- Daniel Everett Martin - 2019
- Mark Pullins - 2017
- Athena Crystine Sparks - 2019

W. E. Briggs Teaching Excellence Award

- Katharine Lauren Marie Adamyk - 2015
- Jonathan Randall Quartin - 2018
- Patrick Michael Wynne - 2018

Jack Hodges Award for Excellence in Mathematics

- Megan Hannah Collins - 2018
- Alexandra Hope Schwein - 2019

Mr. & Mrs. J. Tour Scholarship

- Ryan Andrew Mike - 2019

Marlene Massaro and David Pratto Scholarship in Mathematics

- Henry Charles Fontana - 2018

Collin Starkweather Award in Mathematics

- Megan Hannah Collins—2019

Frances C. Stribic Scholarship

- Katharine Lauren Marie Adamyk—2019
- Sebastian Bozlee—2017
- Andrew Campbell—2020
- Jerett Charles Cherry—2019
- Taylor Klotz—2018
- Michelle Laura MacLennan—2019
- Caroline Matson—2016
- Daniel Everett Martin—2017
- Ryan Andrew Mike—2018
- Michael Herbert Neuder—2019
- Erin Isabella Smith—2018
- Hanson William Smith—2019
- Athena Crystine Sparks —2019

Sieglinde Haller Scholarship

- Sebastian Bozlee - 2018, 2019
- Andrew James Campbell - 2019
- Daniel Everett Martin - 2018, 2019
- Hanson William Smith - 2017
- Patrick Michael Wynne - 2020
- Zhenhua Wang - 2017, 2018

W. J. Thron Summer Fellowship

- Mark Pullins - 2017

William N. Reinhardt Fund

- Mark Pullins - 2019

University Summer Fellowship

- Katharine Lauren Marie Adamyk - 2018
- Andre Davis - 2020
- Andrew Scott Healy - 2016, 2018
- Trevor Jack - 2018, 2019
- Saeed Khalili - 2017, 2018, 2019
- Taylor Joseph Klotz - 2016
- Ali Lotfi - 2017, 2020
- Caroline Liggett Matson - 2019
- Jonathan Randall Quartin - 2020
- Tyler Schrock - 2018, 2019

Richard Laver Graduate Fellowship Fund

- Caroline Liggett Matson - 2018
- Mark Pullins - 2016

The Adele V. Leonhardy Memorial Scholarship Fund

- Katharine Lauren Marie Adamyk - 2017
- Andrew Scott Healy - 2017
- Taylor Joseph Klotz - 2017
- Sangman Lee - 2020
- Ali Lotfi - 2018, 2019
- Caroline Liggett Matson - 2017
- Mark Pullins - 2018
- Hannah Jean Rieder - 2017

Pi Mu Epsilon (PME) Math Honor's Society

Crossland Joseph Beer

Susan Edith Born

Jonathan Micah Bosnich

Anthony Maurel Carroll

Xiaoliu Chen

Megan Hannah Collins

Ram Diego Ekstrom

Sergey Gitalov

Braden Thomas Griebel

Briana Jo Hackos

Jason Linnebjerg Haw

Kevin Charles Headrick

Liam Richard David Merz Hoffmeister

Ryan Andrew Mike

Megan Elizabeth Nelson

Justin Nicoski

Simon D. Pasillas

Arthur Charles Denis Pellegrino

Connor Ries Plooy

Dante Antonio Salas

Alexandra Hope Schwein

Erin Isabella Smith

Jade VanAusdall

Megan Elizabeth Walters

Alison Michelle Weinberger

Megan Grace Wettstein



Donors to the Mathematics Department

The Mathematics Department is deeply grateful for the generous contributions by our donors. Gifts to the department make possible scholarships, awards, and more. Our alumni and friends are the cornerstone of future success for today and tomorrow's students. If you are interested in becoming a donor we would love your support! Please contact our development coordinator

Jenny Milligan, Jenifer.Milligan@colorado.edu, or

Professor David Grant, grant@colorado.edu, to discuss options. You may also go to math.colorado.edu and click the "Give Now" button.

Thank you!

**this is not an official document. Names and recognitions may be subject to change*