DANIEL CUZZOCREO

CURRICULUM VITAE

Northwestern University   dcuzz@math.northwestern.edu ⇗

Department of Mathematics ⇗   www.math.northwestern.edu/~dcuzz ⇗

2033 Sheridan Rd, Evanston, IL 60208

EDUCATION

Boston University, Boston, MA
    Ph.D. Mathematics   May 2014
    Advisor: Robert Devaney
Tufts University, Medford, MA
    B.A. Mathematics, summa cum laude   May 2009
University of Oxford, Oxford, UK   2007–2008

ACADEMIC APPOINTMENTS

Northwestern University, Postdoctoral Lecturer   2018–present
Northwestern University, Visiting Faculty   2015–2018
Smith College, Visiting Assistant Professor   2014–2015

RESEARCH INTERESTS

Discrete dynamical systems, complex dynamics, parameter spaces of rational maps

HONORS AND AWARDS

Associated Student Government Faculty Honor Roll ⇗, Northwestern University   2019–2020
Excellence in Teaching by a Postdoctoral or Visiting Faculty Member Award,   2019
    Northwestern University
GSO Travel Grant, Boston University   2013
Departmental Award for Excellence in Teaching, Boston University   2012
Presidential Fellowship, Boston University   2009

Northwestern University⟳

Course Instructor

Math 300: Foundations of Higher Mathematics	Sp 2022, Fa 2020
	Sp 2020, Fa 2019, Fa 2018
Math 202: Finite Mathematics	Sp 2022, Fa 2021, Wi 2017
Math 230-1: Multivariable Differential Calculus	Wi 2022, Wi 2020
Math 218-1: Single Variable Calculus with Precalculus	Fa 2021
Math 230-2: Multivariable Integral Calculus	Sp 2021
Math 228-1: Multivariable Differential Calculus for Engineering	Wi 2021
Math 285: Accelerated Mathematics for MMSS	Fa 2020—Sp 2021
(Yearlong sequence in Linear Algebra and Multivariable Calculus)	
Math 220-2: Single Variable Integral Calculus	Su 2020
Math 100: Quantitative Reasoning	Sp 2020
Math 214: Single Variable Calculus III	Fa 2019, Fa 2018
Math 230: Differential Calculus of Multivariable Functions	Wi 2019, Fa 2017, Fa 2015
Math 325: Complex Analysis	Sp 2018
Math 213: Single Variable Calculus II	Sp 2018
Math 212: Single Variable Calculus I	Wi 2018
Math 224: Integral Calculus of One-Variable Functions	Wi 2018, Sp 2017
	Sp 2016, Wi 2016
Math 220: Differential Calculus of One-Variable Functions	Wi 2017, Fa 2015
Math 354: Chaotic Dynamical Systems	Fa 2016
Math 250: Elementary Differential Equations	Sp 2016
Math 499: Graduate Independent Study in Complex Dynamics	Wi 2016, Sp 2016

Northwestern University

Course Coordinator: Coordinating instruction and exams across all sections

Math 230-1: Multivariable Differential Calculus	Wi 2022
Math 230-2: Multivariable Integral Calculus	Sp 2021
Math 228-1: Multivariable Differential Calculus for Engineering	Wi 2021
Math 230-1: Multivariable Differential Calculus	Wi 2020
Math 230: Differential Calculus of Multivariable Functions	Wi 2019
Math 230: Differential Calculus of Multivariable Functions	Fa 2017
Math 224: Integral Calculus of One-Variable Functions	Sp 2017
Math 220: Differential Calculus of One-Variable Functions	Wi 2017

Northwestern University

Instructor: Special non-credit programs

Dynamical Systems and Chaos	Su 2022, Su 2021
College Preparation Program⇗	
How to Make Better Decisions with Math	
College Preparation Program⇗	Su 2022
Quantitative Reasoning	
Bridge Program⇗	Su 2021

Smith College

Course Instructor

Calculus III	Sp 2015
Calculus II	Sp 2015, Fa 2014

Boston University

Course Instructor

Differential Equations	Su 2013
Introduction to Linear Algebra	Su 2012
Complex Variables	Su 2011
Calculus II	Su 2010

ACADEMIC SERVICE AND OUTREACH

Northwestern University

Causeway Postbaccalaureate Program⇗, Mentor and Academic Advisor	2021–2022
Causeway⇗ GRE Bootcamp, Organizer	2021
Teaching Postdoc Peer Observation Program, Organizer	2021–2022
Undergraduate Research and Arts Exposition⇗ Judge	2020, 2021
Bridge Program⇗, Teaching Assistant	2020
Department of Mathematics Climate Committee, Member	2019–2020
Undergraduate Research Assistant Program⇗, Faculty Mentor	2017
Study Brunch, Faculty Volunteer	2015–2020
Graduate Research Opportunities for Women⇗, Volunteer	2016, 2017

Other

Research Practicum⇗, Faculty Advisor, Scholar Launch	2021
Women in Mathematics in New England⇗, Volunteer, Smith College	2014
Graduate Student Dynamics Seminar, Co-organizer, Boston University	2010–2013
AMS Mathematical Reviews, Reviewer	
Various peer-reviewed journals, Referee	

4. *Simple Mandelpinski necklaces for $z^2 + \lambda/z^2$* ↗

with R. Devaney

Difference equations, discrete dynamical systems and applications, 63–72, Springer Proc. Math. Stat., 180, Springer, Berlin, 2016.

3. *Accessible Mandelbrot sets in the family $z^n + \lambda/z^n$* ↗

with P. Blanchard, R. Devaney, E. Fitzgibbon

Qual. Theory Dyn. Syst. 15 (2016), no. 1, 49–66.

2. *A dynamical invariant for Sierpiński cardioid Julia sets* ↗

with P. Blanchard, R. Devaney, E. Fitzgibbon, S. Silvestri

Fund. Math. 226 (2014), no. 3, 253–277.

1. *Checkerboard Julia sets for rational maps* ↗

with P. Blanchard, F. Çilingir, R. Devaney, D. Look, E. Russell

Internat. J. Bifur. Chaos Appl. Sci. Engrg. 23 (2013), no. 2, 1330004, 13 pp.

TALKS

Colloquium, Loyola University Chicago	February 2021
Northwestern Undergraduate Math Society	February 2018
Colloquium, Butler University	November 2016
Dynamics Seminar, Indiana University-Purdue University Indianapolis	November 2015
Dynamics Seminar, Northwestern University	October 2015
Dynamics Seminar, Wesleyan University	April 2015
Dynamics Seminar, University of Chicago	February 2015
Joint Mathematics Meetings:	January 2015
AMS Session on Dynamical Systems and Ergodic Theory	
Complex Analysis, Dynamics and Geometry Seminar; University of Michigan	November 2014
Dynamical Systems Seminar, Boston University	April 2014
48th Spring Topology and Dynamics Conference, University of Richmond	March 2014
Department Talk, Smith College	March 2014
Joint Mathematics Meetings:	January 2014
AMS Special Session on Complex Dynamics	
28th Summer Conference on Topology and its Applications, Nipissing University	July 2013
GSO Graduate Seminar Series, Boston University	March 2013
18th International Conference on Difference Equations and Applications	
Barcelona, Spain	July 2012

Excellence in Teaching Alliance⤳, Northwestern University 2021–2022

AMS Mathematics Research Community⤳, Snowbird, UT. June 2013
 Complex Dynamics.

Topics in Complex Dynamics Summer School⤳, Barcelona, Spain. June 2011