REBEKAH Y. JONES

Department of Mathematics University of Colorado Boulder Campus Box 395 Boulder, CO 80309-0395 ☑ rebekah.jones-1@colorado.edu④ https://rebekah.jones.owlstown.net

Education

PhD in Mathematics

Aug 2014 – July 2019

University of Cincinnati, Cincinnati, OH

Dissertation Advisor: Nageswari Shanmugalingam

Dissertation Title: A characterization of quasiconformal maps in terms of sets of finite perimeter

BS in Mathematics

Jan 2013 – July 2014

University of Cincinnati, Cincinnati, OH

Sacramento City College, Sacramento, CA

Aug 2010 – Dec 2012

Employment

University of Colorado Boulder, Boulder, CO

Aug 2024 – present

Teaching Assistant Professor

University of Colorado Boulder, Boulder, CO

Aug 2022 - May 2024

Teaching Postdoc

New College of Florida, Sarasota, FL

Visiting Assistant Professor of Mathematics

Aug 2019 – May 2022

Teaching Experience

At CU Boulder

- · Calculus 1 Fall 2022
- · Calculus 2 Fall 2022, Spring 2023, Summer 2023, Fall 2023, Spring 2024, Summer 2024 (online), Fall 2024, Spring 2025
- · Calculus 3 Spring 2024, Fall 2024, Spring 2025
- · Linear Algebra for Non-Math Majors Summer 2023
- · Intro to Complex Variables Spring 2023

At New College of Florida

- · Calculus 1 Fall 2019, Fall 2020, Fall 2021
- · Calculus 2 Spring 2020, Spring 2021, Spring 2022
- · Partial Differential Equations Spring 2022
- · Graph Theory Fall 2021

- · Linear Algebra Spring 2021 (online)
- · Geometry Fall 2020 (online)
- · Geometric Measure Theory Spring 2020
- · Point-Set Topology Fall 2019

At University of Cincinnati

- · Ordinary Differential Equations Summer 2019 (online)
- · Foundations of Quantitative Reasoning Spring 2019 (flipped)
- · Mathematics of Social Choice Fall 2018
- · College Algebra Fall 2016
- · Applied Calculus I Spring 2016, Fall 2017
- · Applied Calculus II Summer 2016

Other Teaching Activities

Curriculum Development, Calculus sequence, CU Boulder	Fall 2023, Summer 2024
with Harrison Stalvey, Andrew Meier, Lee Roberson, Joseph Timmer, Kevin Manley and Jack Dalton	
Course Coordinator, Calculus 2, CU Boulder	Fall 2023, Spring 2024
Independent Study Project, Measure Theory, New College of Florida	Spring 2022
Service	
Chair , Special Interest Group of the MAA on Inquiry-Based Learning (Chair Elect, Jan 2024 – Dec 2024)	Jan 2025 – present
Organizer , Seminar in Undergraduate Math Education, CU Boulder	Fall 2023 – present
Faculty advisor, Math Club, CU Boulder	Fall 2024 – present
Member, Diversity Committee, CU Boulder	Fall 2024 – present
Secretary of the Faculty, New College of Florida	Spring 2022
President, Mathematics Graduate Student Association, U. of Cincinnati	Fall 2018 – Spr 2019
Member, Graduate Association for Teaching Enhancement, U. of Cincinnati	2018 - 2019

Research Publications

R. Jones, P. Lahti and N. Shanmugalingam, "Modulus of families of sets of finite perimeter and quasiconformal maps between metric spaces of globally Q-bounded geometry". Indiana University Mathematics Journal 69, no. 1, Special Issue (2020), pp. 265-293. arXiv:1806.06211 [math.MG].

R. Jones and P. Lahti, "Duality of Moduli and Quasiconformal Mappings in Metric Spaces". Analysis and Geometry in Metric Spaces 8, no. 1 (2020), pp. 166–181. arXiv:1905.02873 [math.MG]

Research Experience

AMS Mathematics Research Group: Analysis in Metric Spaces

Aug 2020 – June 2021

A professional development program to promote collaborative research among early career mathematicians

Research stay at Linköping University Mathematics Department

Mar – Jun 2017, Feb – May 2018

Seminars & Colloquia

Seminar on Undergraduate Math Education at CU Boulder Developing Effective Active Learning Materials 23 Feb 2024

Mathematics Colloquium at Ball State University

29 Nov 2018

Modulus of families of sets of finite perimeter and quasiconformal maps between metric spaces of globally Q-bounded geometry.

Analysis Seminar at Kenyon College

12 Nov 2018

Functions of bounded variation and sets of finite perimeter.

Analysis Seminar at Linköping University

28 Feb 2018

Dimension distortion of sets of finite perimeter under a quasisymmetric map in a metric space.

Conference Talks

Mathematics Continued Conference: An Undergraduate Conference hosted virtually by University of Connecticut Sets of Finite Perimeter.

25 Oct 2020

Geometric and Harmonic Analysis 2019: A Conference for Graduate Students at University of Connecticut

28 Mar 2019

Modulus of families of sets of finite perimeter and quasiconformal maps between metric spaces of globally Q-bounded geometry.

AMS Spring Central and Western Joint Sectional Meeting

22 Mar 2019

at University of Hawaii at Manoa

Modulus of families of sets of finite perimeter and quasiconformal maps between metric spaces of globally Q-bounded geometry.

AMS Fall Eastern Sectional Meeting

29 Sep 2018

at University of Delaware

 $Modulus\ of\ families\ of\ sets\ of\ finite\ perimeter\ and\ quasiconformal\ maps\ between\ metric\ spaces\ of\ globally\ Q-bounded\ geometry.$

Workshops, Panels & Session Organization

Co-organizer, Inquiry-Based Learning Contributed Paper Session, Math Fest 2024 8–9 Aug 2024

Panelist, Academic Job Panel, hosted by the Diversity Committee and Math for All, 19 March 2024 CU Boulder

Participant, Chart Your Course Training Workshop, New College of Florida 19–21 July 2021 Redesigned Calculus 1 to fit new general education curriculum guidelines

Co-facilitator (with Ben Merritt, Crystal Whetstone and Pieter-Jan Van Camp),

Teach me to Teach Workshop, hosted by the Center for the Enhancement of Teaching & Learning, University of Cincinnati

Presenter, "Work-Life Balance," Get up and Go! Workshop, hosted by the Graduate 23 Jan 2019 Association for Teaching Enhancement, University of Cincinnati

Professional Affiliations

American Mathematical Society (AMS) \cdot Mathematical Association of America (MAA) \cdot Association for Women in Mathematics (AWM) \cdot Special Interest Group of the MAA on IBL (SIGMAA IBL)

Technology

Online Learning Platforms: WebAssign, WileyPLUS, MyLab Math, Launch Pad

Learning Management Systems: Blackboard, Canvas

Programming: LaTeX, Mathematica (basic)