

Ted D. Juste

- CONTACT INFORMATION Department of Mathematics, 460 McBryde Hall
Virginia Polytechnic Institute and State University
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Blacksburg, VA 24061
Phone: (407)-493-5929; *Email:* tedjuste@vt.edu
- RESEARCH INTERESTS Applied Functional Analysis, frame theory, phase retrieval, applied Harmonic Analysis.
- CITIZENSHIP USA
- EMPLOYMENT 2019–Present: **Instructor**, Virginia Tech.
2016–2019: **Graduate Teaching Associate**, University of Central Florida.
2014–2016: **Graduate Teaching Assistant**, University of Central Florida.
- EDUCATION Ph.D in Mathematics, *University of Central Florida* *Expected* August 2019
Dissertation: “Frames and Phase Retrieval”
Advisor: [Deguang Han](#)
- M.S in Mathematics, *University of Central Florida* May 2014
- B.A. in Mathematics, *University of Florida* August 2008
- PUBLICATIONS & PREPRINTS Li, L., Juste, T., Brennan, J., Cheng, C. and Han, D. (2019). [Phase Retrievable Projective Representation Frames for Finite Abelian Groups](#). *Journal of Fourier Analysis and Applications*, 85(1): 86-100, 2019.
- Han, D., Juste, T. [Phase-retrievable Operator-valued Frames and Representations of Quantum Channels](#). *Linear Algebra and its Applications*, 579: 148-168, 2019.
- Han, D., Juste, T., Li, Y., and Sun, W. [Frame Phase-retrievability and Exact Phase-retrievable Frames](#). *Journal of Fourier Analysis and Applications*, 25: 3154-3173, 2019.
- CONFERENCE PRESENTATIONS
- “Frame phase-retrievability and exact phase retrievable frames”
AMS Fall Southeastern Sectional Meeting (September 23-24, 2017)
Special Session on Applied Harmonic Analysis: Frames, Samplings, and Applications.
Orlando, Florida.
 - “Exact phase-retrievable frames”
AMS Spring Southeastern Sectional Meeting (April 14-15, 2018)
Special Session on Harmonic Analysis, Functional Analysis, and Their Applications.
Nashville, Tennessee.

TEACHING
EXPERIENCE

Instructor

Department of Mathematics, Virginia Tech
MATH 1225: Calculus of a Single Variable

Fall 2019

Instructor of Record

Department of Mathematics, University of Central Florida
MAC2313: Calculus with Analytic Geometry III

Fall 2018

Instructor of Record

Department of Mathematics, EXCEL Program, University of Central Florida

MAC2313: Calculus with Analytic Geometry III Summer 2019
MAC2312: Calculus with Analytic Geometry II Spring 2019
MAC2312: Calculus with Analytic Geometry II Spring 2018
MAC2312: Calculus with Analytic Geometry II Fall 2017
MAC2312: Calculus with Analytic Geometry II Spring 2017
MAC2312: Calculus with Analytic Geometry II Fall 2016

Teaching Assistant

Department of Mathematics, University of Central Florida

MAC2311: Calculus with Analytic Geometry I Summer 2017
MAP2302: Ordinary Differential Equations I Spring 2016
MAC2311: Calculus with Analytic Geometry I Fall 2015
MAC2311: Calculus with Analytic Geometry I Spring 2015
MAC2311: Calculus with Analytic Geometry I Fall 2014

SERVICE

Student Mentor(*Math Knight*)

A weekly problem solving session for high school students who intend to participate in the AMC 10, AMC 12, and the AIME. Spring 2019

Department of Mathematics, University of Central Florida

WORKSHOPS

[IMA 2015: Modern Harmonic Analysis and Applications](#) (University of Maryland, College Park, July 20 - August 7, 2015)

This was a three-week workshop on modern harmonic analysis and its applications. Each day consisted of two one-and-a-half hours long lectures followed by either a problem-solving session or a computer lab session. The organizers were Radu Balan, John Benedetto, Wojtek Czaja, and Kasso Okoudjou. I was introduced to my research topic, phase retrieval, during this workshop.

NSF CBMS Conference

[Harmonic Analysis: Smooth and Non-Smooth](#) (Iowa State University, June 4-8, 2018)

The main topic during this workshop was harmonic analysis on fractals. We went over some of the key results of the last couple years and some of the open questions, including Fuglede's conjecture. The principal Lecturer was Palle Jorgensen.

PROGRAMMING MATLAB