MARK E. MAGSINO

Norbert Wiener Center for Harmonic Analysis and Applications
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EDUCATION

University of Maryland, College Park **Aug 2012 - May 2018**
Ph.D Student in Mathematics

Carnegie Mellon University **Aug 2008 - May 2012**
B.S. in Mathematics & Japanese Studies
Member of Phi Beta Kappa

RESEARCH INTERESTS

Pure and applied harmonic analysis. I study Gabor frames, CAZAC sequences, and their relationship. I also study generalizations of CAZAC sequences to the real line, as well as some topics in image processing, e.g. demosaicing and single-pixel imaging.

PUBLICATIONS

1. J. Benedetto, K. Cordwell, and M. Magsino. "CAZAC Sequences and Haagerup's Characterization of Cyclic N-roots". Pre-print.
2. M. Magsino. "Constructing Tight Gabor Frames Using CAZAC Sequences". To appear in Sampling Theory in Signal and Image Processing Journal.

PROFESSIONAL EXPERIENCE

Graduate Student Intern. MITRE Corporation. McLean, VA **Jun 2015 - Aug 2015**
- Worked on a movement detection algorithm for Wide Area Motion Imagery (WAMI) data, and on data analytics for wearable devices.

Teaching Assistant. University of Maryland **Spring 2014 - Spring 2017**

Directed Reading Program Mentor. University of Maryland.
- L. Fox, "Markov Chains and the Ergodic Theorem." **Fall 2013**
- C. Ostermann "A Philosophical Enquiry of ZFC" **Spring 2016**

Course Instructor. University of Maryland. **Spring 2013 - Fall 2013**
- Introduction to Statistics (Fall/Spring) & Differential Equations (Summer)

Teaching Assistant. University of Maryland. **Fall 2012**

Teaching Assistant. Carnegie Mellon University. **Fall 2011 - Spring 2012**

Research Assistant. Carnegie Mellon University. **Summer 2011**
- Assisted Prof. Robert Pego in some basic MATLAB models of various PDEs.

Academic Development Tutor. Carnegie Mellon University. **Jan 2009 - May 2012**

INVITED TALKS AND PRESENTATIONS

Some Properties of Finite Gabor Frames. Preliminary oral exam. University of Maryland.

Constructing Tight Gabor Frames Using CAZAC Sequences. Norbert Wiener Center Seminar. University of Maryland.

SKILLS

Languages	Native speaker of English, Proficient in Japanese
Tools	Matlab, Python

Last updated: November 1, 2017