

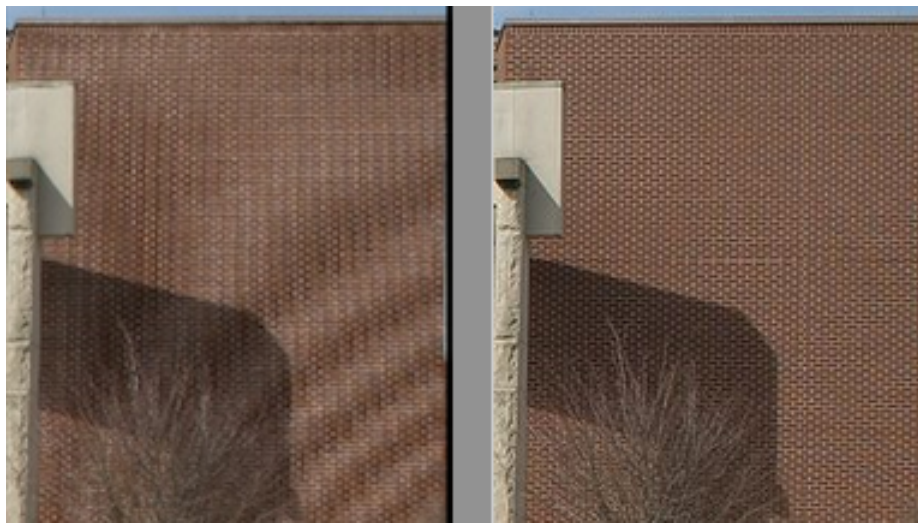
Student Research Talks (StReeTs)

Mason Experimental Geometry Lab (MEGL)

Riesz Bases and Sampling Theory

Shauna Simeone

Department of Mathematics Sciences
George Mason University



Abstract

In this talk we will discuss Riesz basis and their applications to sampling theory. In an infinite dimensional Hilbert space, a Riesz basis is as close as you can get to an orthonormal basis in some cases. In fact, you are a Riesz basis if there exists a bounded invertible operator such that when applied to the basis, you get an orthonormal basis as an output. We will discuss the natural thought progression which demonstrates the development of interest in Riesz basis and their connection to sampling theory and signal processing.

Date: Friday, April 1, 2016

Time: 2:30pm–3:30pm

Place: Exploratory Hall 4106

Pizza and soda will be served at the presentation.

For further information or for special accommodations, please contact Sean Lawton via email at seanlawton@gmail.com or drop by the MEGL.