



MARQUETTE  
UNIVERSITY

HELEN WAY KLINGLER  
COLLEGE OF ARTS AND SCIENCES

Department of Mathematics, Statistics and Computer Science

## COLLOQUIUM ANNOUNCEMENT

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### *BiLinear, Bicubic, and In Between Spline Interpolation*

Dan Rowe  
MSCS Department  
Marquette University

**2:00 PM, Thursday, February 15, 2018**

Cudahy Hall, Room 401

#### **Abstract**

Artificially increasing the resolution of a pixelized image is an important and interesting problem. In this talk, I will present the local image space technique of bicubic spline interpolation. First I will present interpolation in a time series via linear interpolation, cubic interpolation, and cubic spline interpolation. After describing how interpolation works in one dimension, I will generalize it to two dimensions and describe interpolation in an image via bilinear interpolation, bicubic interpolation, and bicubic spline interpolation. This will be an educational talk on applied polynomial interpolation with the use of matrix algebra for systems of equations.

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1313 W. Wisconsin Avenue, Cudahy Hall, Room 412, Milwaukee, WI 53201-1881

For further information: see <http://www.marquette.edu/mscs/resources-colloquium.shtml>

or contact Dr. Daniel Rowe #414-288-5228, [daniel.rowe@marquette.edu](mailto:daniel.rowe@marquette.edu)

*POST COLLOQUIUM REFRESHMENTS SERVED IN  
CUDAHY HALL, ROOM 342 AT 4:30 P.M.*