

Loyola University Chicago's SIAM Student Chapter presents

Seminar with Dr. Zeyu Zhou

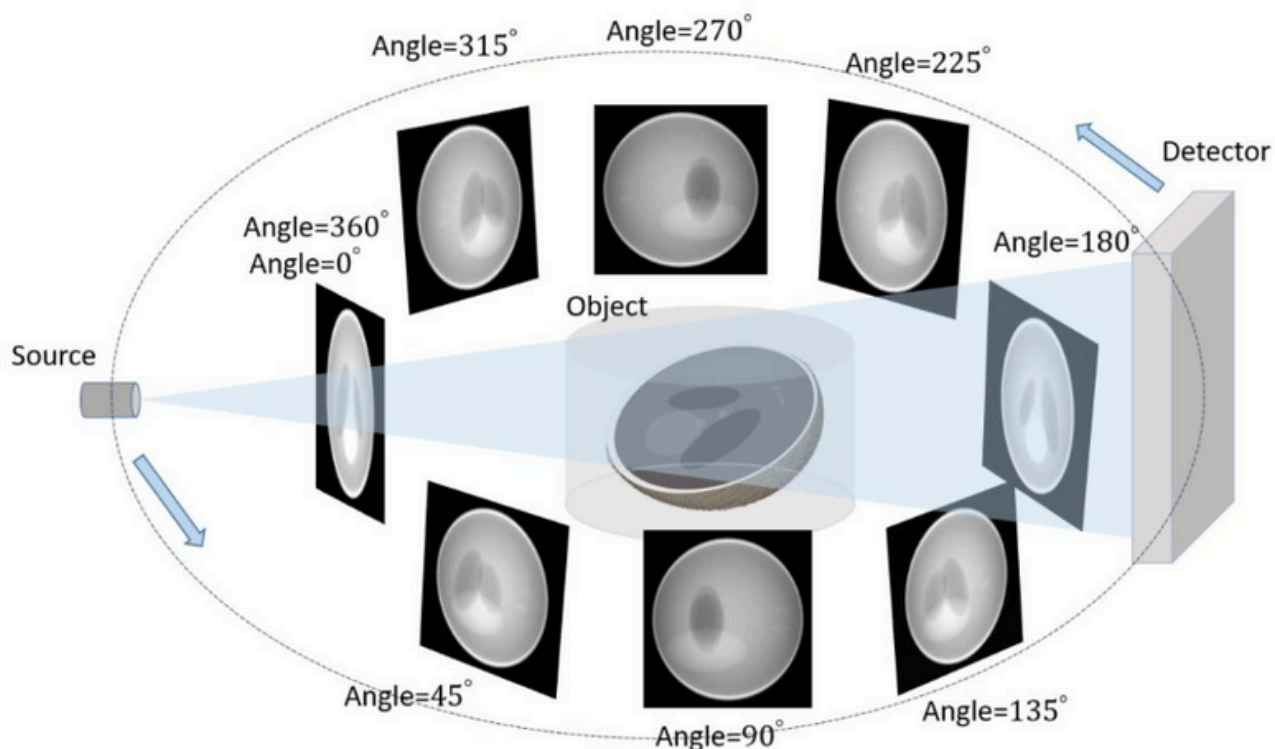
of Carl Zeiss X-ray Microscopy, Inc.

Date: March 31st, 4-5pm

Title: Computed Tomography: Science, Math, and Application

~Refreshments served at 3:30pm at BVM 5th floor~

Location: IES 111



Abstract: Computed tomography (CT) is a widely used imaging technique for non-destruction imaging in medical diagnostics, industrial inspection, and scientific research. This talk gives a comprehensive review of CT, covering its scientific principles, mathematical foundations, and practical applications. We will explore how X-ray projections are acquired and reconstructed using key concepts such as the reconstruction algorithms, phantom calibration and artifacts removal. Additionally, we will also discuss real-world applications of CT in image denoising and defect analysis.