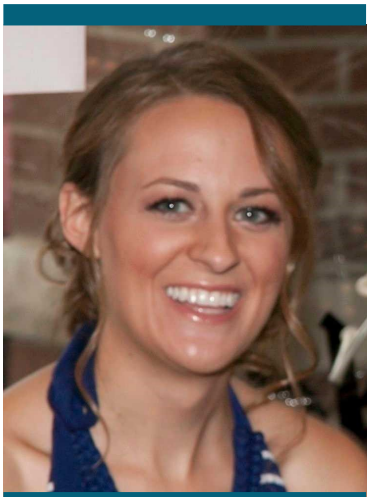
Medical Physics Seminar

Monday, June 19, 2017

1190 WIMR I — 10:00 AM



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High Spatiotemporal Resolution Dynamic Contrast-Enhanced Breast MRI

Breast cancer is the second most common type of cancer in women and the second most common cause of cancer death in women. Magnetic resonance imaging (MRI) is commonly used in breast imaging due to its high sensitivity. Current clinical breast MRI protocols require high spatial resolution in order to assess lesion morphology. Since spatial resolution and temporal resolution are competing demands in MRI, this high spatial resolution currently comes at the expense of temporal resolution, making assessment of lesion kinetics difficult. With recent advances in MRI, higher temporal resolution can be achieved while maintaining acceptably high spatial resolution. This talk focuses on a recently published MRI data acquisition scheme that allows for high spatiotemporal imaging. Initial work evaluating the characteristics of this method for application in breast MRI and demonstrating the feasibility of its use clinically in dynamic contrast-enhanced breast MRI with high spatial resolution and high temporal resolution will be presented.

1190 WISCONSIN INSTITUTES FOR MEDICAL RESEARCH (WIMR) - 10:00 - 11:00 A.M.