



MARQUETTE  
UNIVERSITY

HELEN WAY KLINGLER  
COLLEGE OF ARTS AND SCIENCES

Department of Mathematics, Statistics and Computer Science

## COLLOQUIUM ANNOUNCEMENT

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### *Applications in MRI of Pulmonary Structure and Function*

Andrew Hahn

Department of Medical Physics  
University of Wisconsin - Madison

**3:30 PM, Thursday, November 16, 2017**

Cudahy Hall, Room 401

#### **Abstract**

Many practical challenges must be overcome to utilize MRI in the lung, however, advancements in hyperpolarized noble gas and ultrashort echo time (UTE) MRI technologies and techniques have led to a number of promising applications in functional and structural lung imaging. This talk will summarize these challenges and how they have been addressed, and will also summarize a few of the major recent contributions of MRI to pulmonary imaging. Two state of the art applications will be presented in more depth: functional imaging metrics of pulmonary gas-exchange in fibrotic lung disease with hyperpolarized Xenon-129, and high resolution structural imaging in the lungs of non-sedated, quiet-breathing neonatal intensive care unit patients using UTE MRI.

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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.*