



Lakehead
UNIVERSITY

Department of
Physics



Zoom Seminar Presentation by:

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Pulmonary and Neuro Imaging using Hyperpolarized Gas MRI

Hyperpolarized (HP) xenon-129 (^{129}Xe) was co-invented by Dr. Mitchell Albert in the early 1990's. Over the last 30 years, the field of HP ^{129}Xe magnetic resonance imaging (MRI) has been under intensive development. This presentation highlights the history of HP ^{129}Xe MRI development with a focus on the recent applications of HP ^{129}Xe MRI for functional brain and lung imaging. The main applications of HP ^{129}Xe brain imaging will be discussed, such as stroke imaging, Alzheimer's disease detection, hemodynamic response detection, and functional brain imaging. The main applications of HP ^{129}Xe lung disease imaging will also be discussed, such as asthma, chronic obstructive pulmonary disease (COPD), idiopathic pulmonary fibrosis (IPF), and cystic fibrosis (CF).

FRIDAY, MARCH 5th, 2021

1:30 to 2:30 PM

Zoom Event