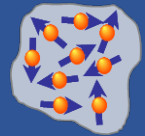


Leipzig Spin Resonance Colloquium

June 16th, 2021 – 16:00 Leipzig time – on Zoom



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Durham NC



Hyperpolarized ^{129}Xe MRI: Past, Present, and Future

MRI using hyperpolarized noble gases was introduced in 1994, and while showing extraordinary promise, has experienced a tortuous clinical development pathway. Although the elegance of acquiring rapid and non-invasive 3D images of an inhaled, noble gas, captivated many scientists and clinicians from the outset, its widespread clinical dissemination has been slower than might have been expected. Some of the impediment was readily attributed to barriers associated with intellectual property rights, poor corporate stewardship, and a challenging regulatory environment. Fortunately, these issues have now largely been addressed and with continued technical development ^{129}Xe MRI is poised for FDA approval. This would make it the first approved drug/device combination that uses multi-nuclear MRI. With this progress we are now in a position to exploit the solubility and chemical shift properties that make ^{129}Xe so uniquely suited to imaging pulmonary gas exchange, the most fundamental function of the lung. In this talk, I will review the history of hyperpolarized ^{129}Xe development, key clinical and technical milestones, as well as the commercial and regulatory progress. Beyond these milestones, I will discuss efforts to conduct larger-scale clinical trials to demonstrate the clinical value of ^{129}Xe MRI by improving patient management. And finally, some interesting new applications in organs beyond the lung will be discussed.

June 16th, 2021 - 16:00 CEST (Berlin) - 22:00 CST (Peking) - 07:00 PST (San Francisco) - 10:00 EST (New York)

Zoom: <https://uni-leipzig.zoom.us/my/lsrcolloquium>

For Zoom passcode register at: <https://bloch.physgeo.uni-leipzig.de/amr/lsrcolloquium>