Contribution ID: **37** Type: **Oral**

Imaging Gas-Exchange Lung Function using Density-Weighted MRSI and Hyperpolarised 129Xe Gas

Monday, 30 May 2022 08:30 (20 minutes)

3D density-weighted MRSI in combination with a frequency-tailored RF excitation pulse was designed, implemented and used to detect xenon gas in the lungs and xenon dissolved in lung tissue and blood. These images were used to calculate quantitative ratio maps of tissue-to-gas, blood-to-gas, and blood-to-tissue with good SNR.

Primary authors: SCHULTE, Rolf (GE Healthcare); Dr COLLIER, Guilhem (POLARIS, Department of Infection Immunity & Cardiovascular Disease, University of Sheffield, Sheffield, United Kingdom); Mr BALL, James (POLARIS, Department of Infection Immunity & Cardiovascular Disease, University of Sheffield, Sheffield, United Kingdom); Dr NORQUAY, Graham (POLARIS, Department of Infection Immunity & Cardiovascular Disease, University of Sheffield, Sheffield, United Kingdom); Dr RAO, Madhwesha (POLARIS, Department of Infection Immunity & Cardiovascular Disease, University of Sheffield, Sheffield, United Kingdom); Prof. WILD, Jim (POLARIS, Department of Infection Immunity & Cardiovascular Disease, University of Sheffield, Sheffield, United Kingdom)

Presenter: SCHULTE, Rolf (GE Healthcare)

Session Classification: Metabolic Imaging with PET, MR and PET/MR

Track Classification: Metabolic Imaging with PET, MR and PET/MR