

Hyperpolarized Imaging - from experimental towards clinical application

Tuesday 14 January 2020 16:45 (15 minutes)

Dissolution dynamic nuclear polarization allows to temporarily enhance polarization of carbon-13 and other nuclei by up to four orders of magnitude and yields injectable tracers in solution for in-vivo applications. In recent years, various substrates have been proposed to probe different metabolic pathways or to act as inert contrast agents. To this end, we show work on long-lived polarization in silicon-29 and its potential for in-vivo imaging. We demonstrate advanced imaging approaches of pyruvate and urea along with modelling to assess relevant biological information in both the experimental and human setting and provide an outlook towards optimal experimental design.

Presenter: KOZERKE, Sebastian

Session Classification: NMR session 4