



Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg
Lehrstuhl für Wissenschaftliches Rechnen IX

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Optimization of MR Fingerprinting Sequences with Partially Spoiled Steady States

Magnetic Resonance Fingerprinting (MRF) is a quantitative MRI method that, instead of using homogeneous sequences, employs a rapidly varying series of pulse parameters. This produces for each tissue a characteristic “fingerprint” of signal evolution, which is matched against a simulated database (“dictionary”) of possible signal trajectories to determine tissue parameters simultaneously and efficiently. The partial-spoiling concept introduced by Ganter abandons full gradient spoiling between pulse cycles and deliberately preserves a portion of the phase coherence. When combined with MR fingerprinting, this approach yields more complex signal evolutions with enhanced sensitivity to T_1 and T_2 parameters.

We present various optimization strategies to improve the acquisition of MRF sequences with partially spoiled steady states, aiming to achieve greater accuracy in parameter estimation.

Ort: Raum 30.02.003 (Mathematik West, 2.Stock)

Zeit: Donnerstag, 24.4.25, 12:00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.
You are cordially invited to this lecture.

gez. Prof. Dr. Alfio Borzi
gez. Prof. Dr. Frank Werner