Single Shot Spiral Turbo Spin Echo (TSE) MRI at 1.5 and 3 Tesla

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Webex Link:https://bit.ly/3DI5O90
Or Scan QR Code.

Spiral MRI has been known since 1983. Spiral trajectory offer an extremely fast and efficient approach to cover two-dimensional k-space with an intrinsically one-dimensional trajectory – much more efficient than the line-by-line scanning of commonly used Cartesian sampling. Spirals have additional advantages like intrinsic motion compensation. However, they have not made it into clinical routine due to their extreme sensitivity to deviations between the actual and the nominal sampling trajectory and to off-resonance effects, where even slight inhomogeneities due to susceptibility effects lead to strong image artifacts.

The presentation will discuss principles and implementation of single shot spiral TSE at 1.5 and 3 T. High-quality images with 1 mm in-plane resolution are acquired in < 200 ms allowing extremely fast screening, e.g. in non-cooperative patients.