The field of ultra-high field magnetic resonance imaging (UHF-MRI) has reached scientific maturity covering various topics, such as clinical applications, basic and cognitive neuroscience. Despite some technological challenges, these topics greatly benefit from UHF due to its superior signal- and contrast-to-noise compared to standard field strengths. Nevertheless, the potential of UHF-MRI is far from fully exploited. In this presentation, I will give an overview on the state-of-the art of UHF-MRI, including theoretical consideration on the benefits and challenges of UHF-MRI. In particular, I will present current research on functional and anatomical imaging, arterial spin labeling and diffusion MRI, which will be presented in more detail in the following talks of this session.