

The Qualitative and Quantitative Brain

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Abstract

In standard magnetic resonance imaging (MRI), several image contrasts are exploited to deduce information about brain anatomy, brain function, and various pathologies (such as Multiple Sclerosis and Parkinson's Disease). Apart from these routine methods, there is an increasing number of quantitative MRI (qMRI) techniques. The goal of qMRI is the direct measurement of tissue parameters such as the magnetic relaxation times and the water content. Parameter maps allow for the construction of improved anatomical data sets or for the detection of diffuse pathologies that are not visible in standard MR images. In this presentation, I will give an overview of several MR methods developed at the Brain Imaging Centre, comprising both classical and quantitative techniques.