

CROSS-RELAXATION IMAGING: METHODS, CHALLENGES AND APPLICATIONS

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Abstract – An overview of quantitative magnetization transfer (qMT) is given, with focus on cross-relaxation imaging (CRI) as a fast method for quantifying the proportion of protons bound to complex macromolecules in tissue. The procedure for generating CRI maps is outlined, showing examples in the human brain and knee, and discussing the caveats and challenges in generating precise and accurate CRI maps. Finally, several applications of CRI for imaging tissue microstructure are presented.