

Abstract

Diffusion tensor imaging is a non-invasive in vivo image modality that allows us to measure molecular diffusion of water in tissues. We characterize diffusion transport of water by an effective diffusion tensor D . The practical importance of the effective diffusion tensor is that it contains new and useful structural and physiological information about tissues that were previously unobtainable. In this article, we present a software implementation of the estimation of these tensors and their visualization in order to extract these information.