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The Fully Anisotropic Diffusion Tensor in the Parker Field Case

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Spatial Diffusion of cosmic rays in weakly turbulent magnetic fields can be fully anisotropic. This is especially important for the transport of energetic electrons from Jupiter. In this case the local diffusion tensor has diagonal form with three distinct diffusion coefficients. Here I will present details of a generalized method to transform this local diffusion tensor to a global reference frame. The resulting differences in the global diffusion tensor coefficients are illustrated in the example case of the parker field. An outlook on further applications of this approach is given.