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			authors	<ul style="list-style-type: none">M. T. Ilhon	DUPLICATES	1141
	authors	<ul style="list-style-type: none">Manuel Torrilhon	title	Uniqueness conditions for Riemann problems of ideal magnetohydrodynamics		
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	id	id-8277710197637793425	abstract	The equations of ideal magnetohydrodynamics (MHD) form a non-strict hyperbolic system with a non-convex flux function and admit non-regular, so-called intermediate shocks. The presence of non-regular waves in the MHD system causes the Riemann problem to be not unique in some cases. This paper investigates the uniqueness of Riemann solutions of ideal MHD. To determine uniqueness conditions we discuss the correspondence of non-regular solutions and non-uniqueness. Additionally the structure of the Hugoniot curves and its non-regular behaviour are demonstrated. It follows that the degree of freedom for solving a Riemann problem is reduced in the case of a non-regular solution. From this, we can deduce uniqueness conditions depending on the initial conditions of an MHD Riemann problem. The results also allow one to construct non-unique solutions. We give an example for the case of non-planar initial conditions.		
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