

cases	doc_1		doc_2		decision	id
					DUPLICATES	133
			authors	<ul style="list-style-type: none">Xumin Gu		
	authors	<ul style="list-style-type: none">Xumin Gu	title	Well-posedness of axially symmetric incompressible ideal magnetohydrodynamic equations with vacuum under the Rayleigh-Taylor sign condition		
	title	Well-posedness of axially symmetric incompressible ideal magnetohydrodynamic equations with vacuum under the Rayleigh-Taylor sign condition	publication_date	2017-12-06 12:14:33+00:00		
	publication_date	2017-12-06 00:00:00	source	SupportedSources.ARXIV		
	source	SupportedSources.OPENALEX	journal	None		
	journal	arXiv (Cornell University)	volume			
	volume		doi			
	doi	None	urls	<ul style="list-style-type: none">http://arxiv.org/pdf/1712.02152v1http://arxiv.org/abs/1712.02152v1http://arxiv.org/pdf/1712.02152v1		
	urls	<ul style="list-style-type: none">https://openalex.org/W2774144241	id	id-7065163989295393136		
	id	id-3965781455800267675	abstract	We consider a free boundary problem for the axially symmetric incompressible ideal magnetohydrodynamic equations that describes the motion of the plasma in vacuum. Both the plasma magnetic field and vacuum magnetic field are tangent along the plasma-vacuum interface. Moreover, the vacuum magnetic field is composed in a non-simply connected domain and hence is non-trivial. Under the Rayleigh-Taylor sign condition on the free surface, we prove the local well-posedness of the problem in Sobolev spaces. Furthermore, we also prove the local well-posdeness under a more general "stability" assumption for the initial data, which provided that the Rayleigh-Taylor sign condition is satisfied at all those points of the initial interface where the non-collinearity condition fails.		
	abstract		versions			
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