

cases	doc_1		doc_2		decision	id
			authors	<ul style="list-style-type: none"><li>Xumin Gu</li></ul>	NOT DUPLICATES	1238
	authors	<ul style="list-style-type: none"><li>Xumin Gu</li></ul>	title	Well-posedness of axially symmetric incompressible ideal magnetohydrodynamic equations with vacuum under the non-collinearity condition		
	title	Well-posedness of axially symmetric incompressible ideal magnetohydrodynamic equations with vacuum under the Rayleigh-Taylor sign condition	publication_date	2017-11-23 10:42:58+00:00		
	publication_date	2017-12-06 00:00:00	source	SupportedSources.ARXIV		
	source	SupportedSources.SEMANTIC_SCHOLAR	journal	None		
	journal	arXiv: Analysis of PDEs	volume			
	volume		doi			
	doi		urls	<ul style="list-style-type: none"><li>http://arxiv.org/pdf/1711.09757v1</li><li>http://arxiv.org/abs/1711.09757v1</li><li>http://arxiv.org/pdf/1711.09757v1</li></ul>		
	urls	<ul style="list-style-type: none"><li>https://www.semanticscholar.org/paper/815ae9c974d22a42095c4553da1d40868dd13f06</li></ul>	id	id-4316584226019069776		
	id	id87086665001411119	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	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.	versions			
	versions					