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	authors	<ul style="list-style-type: none">Hao, C.Luo, T.	authors	<ul style="list-style-type: none">Chengchun HaoTao Luo	NOT DUPLICATES	968
	title	Well-posedness for the linearized free boundary problem of incompressible ideal magnetohydrodynamics equations	title	Well-posedness for the Linearized Free Boundary Problem of Incompressible Ideal Magnetohydrodynamics Equations		
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	id	id-1981418509737995066	id	id7843399000927361114		
	abstract		abstract	We study the well-posedness theory for the linearized free boundary problem of incompressible ideal magnetohydrodynamics equations in a bounded domain. We express the magnetic field in terms of the velocity field and the deformation tensors in the Lagrangian coordinates, and substitute the magnetic field into the momentum equation to get an equation of the velocity in which the initial magnetic field serves only as a parameter. Then, we linearize this equation with respect to the position vector field whose time derivative is the velocity, and obtain the local-in-time well-posedness of the solution by using energy estimates of the tangential derivatives and the curl with the help of Lie derivatives and the smooth-out approximation.		
	versions		versions			