

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none">Jianfeng Wang	authors	<ul style="list-style-type: none">Jianfeng Wang	NOT DUPLICATES	497
	title	The existence and uniqueness of the smoothing solution of the Navier-Stokes equations	title	The global existence of the smoothing solution for the Navier-Stokes equations		
	publication_date	2011-06-22 04:22:52+00:00	publication_date	2011-07-04 05:43:40+00:00		
	source	SupportedSources.ARXIV	source	SupportedSources.ARXIV		
	journal	None	journal	None		
	volume		volume			
	doi		doi			
	urls	<ul style="list-style-type: none">http://arxiv.org/pdf/1106.4367v1http://arxiv.org/abs/1106.4367v1http://arxiv.org/pdf/1106.4367v1	urls	<ul style="list-style-type: none">http://arxiv.org/pdf/1107.0527v1http://arxiv.org/abs/1107.0527v1http://arxiv.org/pdf/1107.0527v1		
	id	id-112041557541004599	id	id7429514395972201096		
	abstract	This paper discussed the existence and uniqueness of the smoothing solution of the Navier-Stokes equations. At first, we construct the theory of the linear equations which is about the unknown four variables functions with constant coefficients. Secondly, we use this theory to convert the Navier-Stokes equations into the simultaneous of the first order linear partial differential equations with constant coefficients and the quadratic equations. Thirdly, we use the Fourier transformation to convert the first order linear partial differential equations with constant coefficients into the linear equations, and we get the explicit general solution of it. At last, we convert the quadratic equations into the integral equations or the question to find the fixed-point of a continuous mapping. We use the theories about the Poisson equation, the heat-conduct equation, the Schauder fixed-point theorem and the contraction mapping principle to prove that the fixed-point is exist and unique except a set whose Lebesgue measure is 0, hence the smoothing solution of the Navier-Stokes equations is also exist and unique except a set whose Lebesgue measure is 0.	abstract	This paper discussed the global existence of the smoothing solution for the Navier-Stokes equations. At first, we construct the theory of the linear equations which is about the unknown four variables functions with constant coefficients. Secondly, we use this theory to convert the Navier-Stokes equations into the simultaneous of the first order linear partial differential equations with constant coefficients and the quadratic equations. Thirdly, we use the Fourier transformation to convert the first order linear partial differential equations with constant coefficients into the linear equations, and we get the explicit general solution of it. At last, we convert the quadratic equations into the integral equations or the question to find the fixed-point of a continuous mapping. We use the theories about the Poisson's equation, the heat-conduct equation, the Schauder fixed-point theorem to prove that the fixed-point is exist, hence the smoothing solution for the Navier-Stokes equations is globally exist.		
	versions		versions			