

cases	doc_1		doc_2		decision	id
					DUPLICATES	165
			authors	<ul style="list-style-type: none"><li>• Zheng Chen</li><li>• Liu Liu</li><li>• Lin Mu</li></ul>		
	authors	<ul style="list-style-type: none"><li>• Chen, Z.</li><li>• Liu, L.</li><li>• Mu, L.</li></ul>	title	Solving the linear transport equation by a deep neural network approach		
	title	Solving the linear transport equation by a deep neural network approach	publication_date	2021-02-18 04:47:34+00:00		
	publication_date	2022-01-01 00:00:00	source	SupportedSources.ARXIV		
	source	SupportedSources.CROSSREF	journal	None		
	journal		volume			
	volume		doi			
	doi	10.3934/dcdss.2021070	urls	<ul style="list-style-type: none"><li>• <a href="http://arxiv.org/pdf/2102.09157v1">http://arxiv.org/pdf/2102.09157v1</a></li><li>• <a href="http://arxiv.org/abs/2102.09157v1">http://arxiv.org/abs/2102.09157v1</a></li><li>• <a href="http://arxiv.org/pdf/2102.09157v1">http://arxiv.org/pdf/2102.09157v1</a></li></ul>		
	urls	<ul style="list-style-type: none"><li>• <a href="http://dx.doi.org/10.3934/dcdss.2021070">http://dx.doi.org/10.3934/dcdss.2021070</a></li></ul>	id	id1792227302518164834		
	id	id978812851276993200	abstract	In this paper, we study the linear transport model by adopting the deep learning method, in particular the deep neural network (DNN) approach. While the interest of using DNN to study partial differential equations is arising, here we adapt it to study kinetic models, in particular the linear transport model. Moreover, theoretical analysis on the convergence of the neural network and its approximated solution towards the analytic solution is shown. We demonstrate the accuracy and effectiveness of the proposed DNN method in the numerical experiments.		
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