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cases	authors	Gnoatto, Alessandro Patacca, Marco Picarelli, Athena	authors	Alessandro Gnoatto Athena Picarelli Marco Patacca		
	title	A deep solver for BSDEs with jumps	title	A deep solver for BSDEs with jumps		
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	urls	http://arxiv.org/abs/2211.04349	urls	https://core.ac.uk/download/543577172.pdf		
	id	id-2969547061220820831	id	id1734180830966171868	1	
	abstract	The aim of this work is to propose an extension of the Deep BSDE solver by Han, E, Jentzen (2017) to the case of FBSDEs with jumps. As in the aforementioned solver, starting from a discretized version of the BSDE and parametrizing the (high dimensional) control processes by means of a family of ANNs, the BSDE is viewed as model-based reinforcement learning problem and the ANN parameters are fitted so as to minimize a prescribed loss function. We take into account both finite and infinite jump activity by introducing, in the latter case, an approximation with finitely many jumps of the forward process. Comment: 31 page	abstract	The aim of this work is to propose an extension of the Deep BSDE solver by Han, E, Jentzen (2017) to the case of FBSDEs with jumps. As in the aforementioned solver, starting from a discretized version of the BSDE and parametrizing the (high dimensional) control processes by means of a family of artificial neural networks (ANNs), the BSDE is viewed as model-based reinforcement learning problem and the ANN parameters are fitted so as to minimize a prescribed loss function. We take into account both finite and infinite jump activity by introducing, in the latter case, an approximation with finitely many jumps of the forward process		
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