
Viscosity Solutions of Systems of PDEs with Interconnected Obstacles and Switching Problem without Monotonicity Condition

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Résumé

We show the existence and uniqueness of a continuous viscosity solution of a system of partial differential equations (PDEs for short) without assuming the usual monotonicity conditions on the driver function. Our method strongly relies on the link between PDEs and reflected backward stochastic differential equations with interconnected obstacles for which we already know that the solution exists and is unique for general drivers.

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