

Recent results on the approximation of optimal control problems and games

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We present some recent contributions on the approximation of Hamilton-Jacobi equations connected to the analysis of optimal control problems and games. The numerical approximation of these equations is a crucial but expensive step which allows for the synthesis of optimal feedback controls and optimal trajectories. Our construction of efficient algorithms is based on Fast Marching methods and Domain Decomposition techniques which allow to reduce the CPU time and memory allocations. This talk will present the two approaches.