

**EXAMPLES OF COMPUTED VIABILITY KERNELS**

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Conflict control systems with state constraints are under consideration. A numerical method of constructing viability kernels, i.e the largest subsets of state constraints where the system trajectories can be confined, is applied to several nontrivial examples. The method can be interpreted as the approximate construction of the Hausdorff limit of sets generated by a backward procedure based on differential games theory essentially developed in works by N. N. Krasovskii and A. I. Subbotin. Numerically, the method is implemented in the framework of computing level sets of approximate solutions to an appropriate Hamilton–Jacobi equation. The main objective of the paper is the demonstration of nontrivial examples of computing viability kernels.

Keywords: differential game, state constraint, viability kernel, backward procedure, Hamilton–Jacobi equation, viscosity solution.

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