

102. Zvi Artstein, **On the Value Function of Singularly Perturbed Optimal Control Systems**. Proceedings of the 43rd IEEE Conference on Decision and Control, Paradise Island, Bahamas, pp. 432-437.

Abstract. The convergence of the value function of a singularly perturbed optimal control problem to the value function of an appropriately chosen variational limit problem is examined. The limit problem is determined by the limit occupational measures of the fast dynamics. The desired convergence is established along with the regularity of the limit value. Both follow from regularity properties of the limit problem.

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