

86. Zvi Artstein, **The chattering limit of singularly perturbed optimal control problems.** Proceedings of the 39th IEEE Conference on Decision and Control, Sydney, Australia, 2000, pp. 564-569.

Abstract. The paper examines the structure of the variational limits that may arise in connection with singularly perturbed optimal control problems. Once the notion of a variational limit is displayed, we analyze the roles of the fast and slow components of the singularly perturbed system in the generation of the variational limits. Comparing a general form of variational limits for singularly perturbed systems to the method of order reduction, which is largely used — yet a special case, is a goal of the paper.

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