

22. Zvi Artstein, **Relaxed controls and the dynamics of control systems.** SIAM J. on Control and Optimization 16 (1978), 689-701.

Abstract. The relationship between relaxed controls and the family of processes or flows generated by ordinary controls is studied. We find that the flows generated by the relaxed controls form a completion of the space of flows generated by ordinary controls. With the aid of this completion we study the asymptotic and limiting behavior of the dynamics of the control system. Invariance properties of the ω -limit sets of admissible solutions are established. Stability, eventual stability and finite time stability properties of solutions with respect to ordinary and relaxed controls are investigated.

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