Zvi Artstein (zvika@wisdom.weizmann.ac.il), Department of Mathematics, Weizmann Institute of Science, Rehovot, Israël, Switches and Impulses Induced by Singular Perturbations

The limit as the small parameter tends to zero of a singularly perturbed system may produce switching of modes and impulses of the slow dynamics. These may be of benefit in an optimal control framework. Conditions for, and examples of, the phenomena will be displayed.