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The Cauchy problem for systems with hysteresis. (English. Russian original) [Zbl 0823.34003](#)
Russ. Acad. Sci., Dokl., Math. 48, No. 3, 502-506 (1994); translation from *Dokl. Akad. Nauk, Ross. Akad. Nauk* 333, No. 3, 285-287 (1993).

Summary: Systems of ordinary differential equations with hysteresis nonlinearities are studied. General conditions are presented for solvability and uniqueness in the case of the Cauchy problem; the structure of the integral funnel is studied.

MSC:

34A12 Initial value problems, existence, uniqueness, continuous dependence and continuation of solutions to ordinary differential equations

34A34 Nonlinear ordinary differential equations and systems, general theory

Keywords:

systems of ordinary differential equations with hysteresis nonlinearities; uniqueness; Cauchy problem; integral funnel