ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

9. Ordinary Differential Equations and Dynamical Systems

1991 MS Classification: 34, 35

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Autonomous impulsive-differential equations

Many papers and some books devoted to impulsive-differential equations have appeared in last years. The moments of impulses (strong discontinuities in solutions) usually considered as preassigned, and therefore the considered equations are necessarily non-autonomous. Some results on the theory of autononomous impulsive-differential equations will be presented. Among them: general definition of such equations in n-dimensional phase space; classification of structuraly stable singullar points for n=2; some interesting examples of autonomous impusive ordinary differential equations, functional differential equations and partial differential equations.