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Bifurcation analysis of Chen's equation. (English) Zbl 1090.37531
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Summary: Anticontrol of chaos by making a nonchaotic system chaotic has led to the discovery of some new chaotic systems, particularly the continuous-time three-dimensional autonomous Chen equation with only two quadratic terms. This paper further investigates some basic dynamical properties and various bifurcations of Chen's equation, thereby revealing its different features from some other chaotic models such as its origin, the Lorenz system.

MSC:

- 37D45** Strange attractors, chaotic dynamics of systems with hyperbolic behavior
- 34C23** Bifurcation theory for ordinary differential equations
- 34C28** Complex behavior and chaotic systems of ordinary differential equations

Cited in **142** Documents

Full Text: [DOI](#)

References:

- [1] DOI: 10.1142/S0218127498001236 · Zbl 0941.93522 · doi:10.1142/S0218127498001236
- [2] DOI: 10.1142/S0218127499001024 · Zbl 0962.37013 · doi:10.1142/S0218127499001024
- [3] DOI: 10.1142/S0218127499000985 · Zbl 0964.93039 · doi:10.1142/S0218127499000985
- [4] DOI: 10.1142/S0218127400001250 · doi:10.1142/S0218127400001250

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