

**Carr, Jack**

**Applications of centre manifold theory.** (English) [Zbl 0464.58001](#)

*Applied Mathematical Sciences*, Vol. 35. New York Heidelberg Berlin: Springer Verlag. XII. 142 p. DM 32.00; \$ 14.60 (1981).

For a scan of this review see the [web version](#).

**MSC:**

- 58-02 Research exposition (monographs, survey articles) pertaining to global analysis
- 37G99 Local and nonlocal bifurcation theory for dynamical systems
- 34C45 Invariant manifolds for ordinary differential equations
- 37D99 Dynamical systems with hyperbolic behavior
- 34E15 Singular perturbations for ordinary differential equations
- 34D20 Stability of solutions to ordinary differential equations
- 35B32 Bifurcations in context of PDEs

Cited in **4** Reviews  
Cited in **626** Documents

**Keywords:**

method of integral manifolds; manifolds of solutions; Ljapunov stability; centre manifold theory for finite dimensional differential systems; stability of zero solution; singular perturbation; rate of decay; Hopf bifurcation in a singular perturbation problem; bifurcation problem with two parameters