

## A Survey of Isochronous Centers

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### 0. SUMMARY

1. Introduction.
2. The center problem and the isochronicity problem.
3. Linearizations.
4. Computation of isochronous constants.
5. Commuting systems.
6. Complex systems.
7. Hamiltonian systems.
8. Uniformly isochronous centers.
9. Non-hamiltonian second order O.D.E's.
10. Quadratic systems.
11. Cubic systems with homogeneous nonlinearities.
12. Cubic reversible systems.
13. Polynomial systems with homogeneous nonlinearities.
14. Isochronous centers of a cubic system with degenerate infinity.
15. Kukles' system.
16. References.