

NPTEL COURSE
TOPICS IN NONLINEAR DYNAMICS

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Reference books and suggested further reading

1. J. Argyris, G. Faust and M. Haase, *An Exploration of Chaos*, North-Holland.
2. G. L. Baker and J. P. Gollub, *Chaotic Dynamics: An Introduction*, Cambridge University Press.
3. D. R. Cox and H. Miller, *The Theory of Stochastic Processes*, Chapman & Hall.
4. R. L. Devaney, *A First Course in Chaotic Dynamical Systems: Theory and Experiment*, Addison-Wesley.
5. W. Hahn, *Theory and Application of Liapunov's Direct Method*, Prentice-Hall.
6. R. C. Hilborn, *Chaos and Nonlinear Dynamics: An Introduction for Scientists and Engineers*, Oxford University Press.
7. E. J. Marsden and M. McCracken, *The Hopf Bifurcation and its Applications*, Springer.
8. J. L. McCauley, *Chaos, Dynamics and Fractals: An Algorithmic Approach to Deterministic Chaos*, Cambridge University Press.
9. E. Ott, *Chaos in Dynamical Systems*, Cambridge University Press.
10. S. N. Rasband, *Chaotic Dynamics of Nonlinear Systems*, Wiley-Interscience.
11. J. T. Sandefur, *Discrete Dynamical Systems: Theory and Applications*, Clarendon Press.
12. H. G. Schuster, *Deterministic Chaos: An Introduction*, VCH Verlagsgesellschaft.
13. S. H. Strogatz, *Nonlinear Dynamics and Chaos: With Applications to Physics, Biology, Chemistry and Engineering*, Addison Wesley.
14. Y. M. Svirzhev and D. O. Logofet, *Stability of Biological Communities*, Mir Publishers.
15. N. G. van Kampen, *Stochastic Processes in Physics and Chemistry*, North-Holland.
16. S. Wiggins, *Introduction to Applied Nonlinear Dynamical Systems and Chaos*, Springer.