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Abstract:	In this expository thesis we study basic ergodic theory and dynamical systems. After a quick revision of basics of measure theory, we define ergodic maps and various properties and characterizations of ergodic maps. Then we discuss proofs of the Birkhoff ergodic theorem and the mean ergodic theorem. Then we discuss mixing and related notions along with a number of examples. Then we introduce measure theoretic entropy and prove its invariance under isomorphisms of dynamical systems. Finally a short introduction to topological entropy is mentioned along with its relation with the measure theoretic entropy.
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