Dense orbits of flows and homeomorphisms on topological spaces

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Existence of a dense orbit (topological transitivity) or a stronger property of all orbits being dense (topological minimality) have strong consequences for the behaviour of a dynamical system and related questions belong to the core of topological dynamics. In this talk I discuss these notions for continuous as well as discrete time systems in a general setting without assuming compactness of the underlying space. Then I proceed to discuss hereditariness of minimality and total minimality, particularly the one relating density of orbits of flows and corresponding t-maps, and density of full orbits versus density of forward or backward semi-orbits.