# Linear chaos - from an apparent paradox to an ubiquitous phenomenon

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An AI-enhanced search via google reveals that "Chaos is a nonlinear phenomenon because it describes how complex, often unpredictable, behavior arises from simple deterministic rules in a system." In this talk we illustrate each part of this statement - with one exception: a system need not be nonlinear in order to be chaotic. And one doesn't have to look far: the linear operations of translation and of differentiation of functions turn out to be chaotic. We also show that (linear) chaos is prevalent - in an algebraic, topological, and probabilistic sense.