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The Minimal Period Problem of Mario Martelli.

In 1969, Jim Yorke proved that if $x(t)$ is a periodic solution of period T to a differential equation defined on a finite dimensional Hilbert Space with Lipschitz constant L , then $TL \geq 2\pi$. This result was extended to infinite dimensional Hilbert Spaces. In the Banach Space case, Yorke and Lasota proved that $TL \geq 4$. During the mid-eighties, Martelli with Busenberg and Fisher verified that $TL \geq 6$ on a Banach Space and that in fact this bound is sharp using an example defined on L_1 of the unit square. In this talk I will go over in detail the history of Martelli's work on this curious and interesting problem along with my own work related to the minimal periods problem posed by Martelli in the Monthly. (Received September 16, 2008)