



# TRINITY UNIVERSITY

DEPARTMENT OF MATHEMATICS

COLLOQUIUM SERIES

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## Non-autonomous Dynamical Systems

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*Abstract:* Non-autonomous systems are those whose dynamics is time-dependent. The complications in studying non-autonomous differential equations or difference equations arise from the fact that they are not dynamical systems and hence they are not amenable to their well established tools and theory. One way to circumvent this is to construct an associated dynamical system on a certain product space. The resulting system is called a skew-product dynamical system. Our focus here will be on periodic systems in which the topology of the product space is simple and where tools from number theory is utilized.

MMS 130

2:10–3:00pm

April 21st, 2009