## Functional Analysis and Mathematical Physics Interdepartmental Research Group (FAMP)

## Colloquium Series Spring 2022

Talk 5: On Linear Chaos in the Space of Convergent Sequences

Gabriel Martinez Lazaro, Student Research Adviser: Marat V. Markin, Ph.D. (Department of Mathematics, California State University, Fresno)

## **Abstract**

We show that linear chaos in the space  $c(\mathbb{N})$  of convergent sequences cannot be arrived at by merely extending the known weighted backward shifts in the space  $c_0(\mathbb{N})$  of vanishing sequences and construct bounded and unbounded linear chaotic operators in  $c(\mathbb{N})$  as conjugate to the chaotic backward shifts in  $c_0(\mathbb{Z}_+)$  via a homeomorphic isomorphism between the two spaces.

Friday, April 29, 10:00 - 11:00 AM (PDT)

Online via Zoom at

https://fresnostate.zoom.us/j/5233106532