Mathematics Colloquium

On the interplay of functional analysis and operator theory

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Friday, October 4, 2019
4:10 – 5 p.m.
Building 53 Room 206

Abstract

We overview some basic and striking facts concerning the theory of hypercyclic operators (considered to be born in 1982):

1. Hypercyclicity is a purely infinite-dimensional phenomenon: no finite dimensional space supports any hypercyclic operator;

2. It is not easy at all to determine whether a linear operator is hypercyclic. However, the set of hypercyclic operators is dense for the Strong Operator Topology in the algebra of linear and bounded operators;

3. Hypercyclicity is far from being an exotic phenomenon: any infinite-dimensional separable Frechet space supports a hypercyclic operator.

About the speaker: Yunied Puig de Dios is a Visiting Assistant Professor at University of California, Riverside. Before that, he was a postdoc at Ben-Gurion University in Isreal and Università degli Studi di Pisa in Italy. He obtained his PhD in 2014 under Dr. Alfred Peris Manguillot, jointly from the Politécnica de Valencia in Spain and the Università degli Studi di Milano in Italy. He works in operator theory: on hypercyclic operators and on operator-theoretic topics related to combinatorics, ergodic theory, and nonstandard analysis.

Cookies will be provided before the talk at 4 p.m.
in the same room as the talk, Building 53 Room 206.