

Bing Speaker Series



Dr. James Keesling
Dept. of Mathematics
University of Florida
Friday, April 17, 2015
3:00-4:00 PM
DERR 329

Some recent progress in the Hilbert-Smith conjecture

Hilbert's Fifth Problem goes back to the famous problem set proposed by David Hilbert in 1900. The problems he proposed ran the gamut of mathematical research at the time. Hilbert's Fifth Problem concerned topological groups and their relationship to geometry and differential equations.

There has been a great deal of success over the past century. However, there is a deep problem that remains. If a compact group acts on a manifold, is it a Lie group? Our talk will discuss the history of this problem and recent progress.

Bio: James Keesling is Professor of Mathematics at the University of Florida. He was Chair from 2008-2013. He works in the areas of topology and dynamics. He also does research in biomathematics and is Co-PI on a project currently funded by FIFA for \$4.6 M to control Citrus Greening. Dr. Keesling has published more than eighty research papers and has been editors of several leading research journals.