HARVARD LOGIC COLLOQUIUM

Maryanthe Malliaris

University of Chicago

Comparing the complexity of unstable theories

DATE: Wednesday, November 19

TIME: 4:30–5:30 pm (Talk), 5:30–6:30 pm (Reception)

LOCATION: Logic Center, Room 420, 2 Arrow Street

In 1967 Keisler posed the problem of Keisler's order, a suggested program for comparing the complexity of classes of mathematical structures using an asymptotic (ultrapower) point of view. The talk will be about recent results in this area, due to Malliaris and to Malliaris and Shelah, which advance this program by developing a sort of fine structure theory for pseudofinite behavior in model theory. In particular, the focus will be on simple theories, a key model-theoretic class which includes the random graph and pseudofinite fields.