



Two approaches to **Vaught's Conjecture**

University of Florida, Mathematics Department
HISTORY LECTURE

by Gerald Sacks

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Date and Time: Monday, Feb. 5, 4:05 - 4:55pm

Room: Little Hall, Room 113

Reception: 5:00-7:00, Little Hall Atrium, Room 339

OPENING REMARKS by

Krishnaswami Alladi, Chair

Chair, Department of Mathematics

Abstract: Vaught's Conjecture says that a countable theory with uncountably many countable models has a perfect kernel of (hence continuum many) countable models. A result of Hjorth implies that Vaught's Conjecture follows from the construction of certain models of size aleph-two. Two approaches to the construction are morasses and forcing. Absoluteness plays a part in both.

About Dr. Sacks: Gerald Sacks became Professor of Mathematics at MIT in 1967 and Professor at Harvard in 1972. He has been a world leader in computability theory since his groundbreaking infinite injury priority argument for the density of the recursively enumerable degrees in 1963. He has also a key figure in the study of saturated models and of higher recursion theory. The Sacks Prize of the Association for Symbolic, awarded annually to the best logic Ph.D. dissertation is named in his honor, in recognition of his many outstanding Ph.D. students, including Harvey Friedman (Ohio State), Richard Shore (Cornell), Stephen Simpson (Penn State), Ted Slaman (Berkeley), as well as more than 200 mathematical descendants.

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