Logic and Combinatorics Seminar

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Cameron Hill
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Thursday, March 29, 2012
3:00 PM
184 Nieuwland Hall

Title: Well-quasi-orders in model-theory

Abstract:

The notion of well-quasi-ordering (w.q.o.) is a mainstay of discrete mathematics, especially structural graph theory, but it has appeared only rarely in the model theory of infinite structures. I will discuss two ways that w.q.o.'s can appear in model theory of locally-finite theories -- a w.q.o. of definable sets, and a w.q.o. of finite submodels -- and how these two kinds of w.q.o.'s can be very closely related in certain “strongly-locally-finite'' theories. Time permitting, I may also discuss a sense in which the w.q.o.'s that arise in model theory are “universal'' for all well-quasi-orders that arise in structurally nice ways.