

## ***LOGIC SEMINAR***

**Guest Speaker: Nick Ramsey**  
**University of Notre Dame**

**Date:** Tuesday, December 5, 2023

**Time:** 2:00 PM

**Location:** 125 Hayes-Healy Bldg

**Zoom URL:** NA



***Lecture Title:***  
**Revisiting a theorem of Lascar and Pillay**

***Abstract***

In the stable context, Shelah's notion of non-forking can be given a characterization in terms of the fundamental order, which relates non-forking to the simpler and easier to understand notion of finite satisfiability. Following work of Kim and Pillay, among others, it was shown that non-forking has many desirable properties in the broader context of simple theories. Although the original definition of non-forking (in terms of dividing along indiscernible sequences) was the one that appeared in most of the arguments that formed the core of simplicity theory, Lascar and Pillay later showed that in this context too, non-forking can be recast in terms of the fundamental order, connecting non-forking extensions to heirs and coheirs. The aim of this talk will be to give an explanation of what all these notions are and why they are interesting. We show that this argument has a meaningful analogue in the NSOP<sub>1</sub> world, which sheds some light on the thorny issue of defining Kim-independence over arbitrary sets. This is part of a joint project with Itay Kaplan.