



Speaker: Siddharth Bhaskar
University of Indiana - Bloomington

Tuesday, April 25, 2017

2:00 PM

125 Hayes-Healy Hall

Title: Thicket density

Abstract:

It turns out that Shelah 2-rank, when formulated for set systems, admits a shatter function and a density ("thicket density") which relates to 2-rank in exactly the same way VC-density and its shatter function relates to VC-dimension. In particular, the shatter function satisfies a Sauer-Shelah dichotomy depending on whether the 2-rank is finite or infinite. Mysteriously, thicket density seems to satisfy many of the same formal identities as VC-density, but we do not know of a way to express one in terms of the other. In this talk, we will present this material, along with some applications including the "original" one in the field of abstract recursion theory.