



Speaker: Rutger Kuyper
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Tuesday, April 12, 2016

2:00 PM

125 Hayes-Healy Hall

Title: Obliterating generosity using symmetric differences

Abstract:

A real A is low for 1-genericity if every 1-generic real X is 1-generic relative to A . By a result of Greenberg, Miller and Yu, it turns out this class contains just the computable sets. Thus, if A is non-computable, then there is some 1-generic real X such that X is not 1-generic relative to A . Can we say anything more specific about how A ‘de-genericizes’ X ? For this reason, we study the class of those A such that the symmetric difference of X and A is 1-generic for every 1-generic set X . In particular, we wonder: does this class contain any non-computable reals? It turns out this is false, using an argument which, surprisingly, passes through some notions commonly used in algorithmic randomness. If time allows, we will also discuss the corresponding result for 1-randomness, which originally inspired this question. This talk concerns joint work with Joseph S. Miller.