

University of Mississippi

eGrove

Dalrymple Lecture Series

Mathematics

4-19-2012

Generic Special Objects

Sławomir Solecki

University of Illinois, Urbana-Champaign

Follow this and additional works at: https://egrove.olemiss.edu/math_dalrymple



Part of the [Applied Mathematics Commons](#), and the [Mathematics Commons](#)

Recommended Citation

Solecki, Sławomir, "Generic Special Objects" (2012). *Dalrymple Lecture Series*. 5.
https://egrove.olemiss.edu/math_dalrymple/5

This Book is brought to you for free and open access by the Mathematics at eGrove. It has been accepted for inclusion in Dalrymple Lecture Series by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.



Department of Mathematics

DALRYMPLE LECTURE

Generic Special Objects

Sławomir Solecki

Thursday, April 19, 2012

Overby Center - Farley Auditorium

6:00 P.M.

Sławomir Solecki has a Ph.D. from California Institute of Technology with A.S. Kechris as adviser. Presently he is a Professor of Mathematics at the University of Illinois at Urbana-Champaign. He is the author of more than 50 research papers on the crossroads of Mathematical Logic, Descriptive Set Theory, Analysis and Topology, and an editor of *Fundamenta Mathematicae*.

Abstract: *I will talk about mathematical objects that have two seemingly contradictory attributes. On the one hand, they are generic within a given class, in the sense that if most objects within the class have a property, then our object has it as well. So generic objects are common. On the other hand, they are very special if they exist, for example, there is always, in essence, at most one such object within a given class. Generic objects show up in various areas of mathematics, for example, in topology, geometry, and analysis. They tend to have astonishing mathematical features. Can you imagine a curve C with the property that if you cover it by the union of two curves C_1 and C_2 , then either C_1 or C_2 must be equal to the whole C ? There is a curve like that and it is one of the generic objects.*

ABOUT THE DALRYMPLE LECTURE SERIES

The Dalrymple Lecture Series was endowed by Mr. and Mrs. Arch Dalrymple II of Amory, MS. It brings distinguished speakers to discuss mathematics and mathematics research but the lectures are aimed at the general audience (students and non-mathematicians are encouraged to attend).