University of Notre Dame Department of Mathematics GRADUATE STUDENT SEMINAR

Sarah Cotter

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Will give a lecture entitled: An Overview of the Surreal Numbers

On

Monday, March 21, 2011

At

4:15 PM

In

229 Hayes-Healy Hall

Abstract

The surreal numbers, a John Conway creation, provide a way of starting from nothing and constructing the real numbers. Along the way, though, they grow to include lessstandard numbers, too - infinite numbers and infinitesimals, as well as things like the square root of infinity. We'll look at two different constructions of the surreal numbers, examine some structural results, and see how several more familiar number systems fit into the surreals.