MATH 595—O-MINIMAL STRUCTURES

Instructor: Philipp Hieronymi

Time: MWF 1–1:50pm
Place: 7 Illini Hall

Content. This course gives an introduction to the construction of o-minimal structures on the real field. The main results discussed in the course will be the o-minimality of the following structures:

- $\mathbb{R}_{exp}$, the real field with the exponential function ([4]),
- $\mathbb{R}_{an}$, the real field with all restricted analytic function ([1]), and
- $\mathbb{R}_{an,exp}$, the real field with the exponential function and all restricted analytic functions ([2, 3]).

Prerequisites. Knowledge of Math 570 and Math 571 are helpful, but not strictly necessary. This course is designed as a sequel to the course ‘O-Minimality’ given as part of the REGS summer program 2013, but participation in that course is not a prerequisite for this Math 595 course.

References