

Research statement
Zoltán Vidnyánszky

I am a second year student of MSc in Mathematics at the Eötvös Lóránd University, and I am interested in set theory, real analysis and topology. I wrote my BSc thesis under the supervision of Péter Komjáth about certain problems in descriptive set theory. The main question was that whether there exists an uncountable set intersecting every nice arc in countably many points. It turned out that this question is closely related to SOCA and forcing and was answered in the later published article of Hart and Kunen. In the past two years I did some research in effective descriptive set theory. I passed some courses in the topics of forcing, basic and advanced set theory and PCF theory (taught by Lajos Soukup), tried to understand the article which proves the consistency of SOCA (Uri Abraham, Matatyahu Rubin, Saharon Shelah: On the Consistency of Some Partition Theorems for Continuous Colorings). Now I am especially interested in $V=L$ and constructibility.