

Even at the outset of my high school studies (at the age of 13) I showed a particular interest for mathematical concepts and therefore my attendance of optional higher-level maths lessons and national contests were highly encouraged by my teachers. Through the problems that I came across during those years I understood how unambiguous the truth is that lies in an abstract mathematical proof, which constitutes the main source of my passion towards maths up to this day.

My interest exceeded the frames of the high school curriculum so I devoted my attention to reading works on graph theory (Bela Andrasfalvai: Introduction to Graph Theory), probability (Gyula Obadovics: Probability) in accordance with the suggestions of my maths teacher Zsolt Vizhanyo and short essays on different Olympiad style problem solving concepts such as the Lifting The Exponent Lemma or the use of Geometric Inversion. I particularly enjoyed the book on Probability, especially the parts that are not based on combinatorics alone but use proper probability tools (random variables, Bayes Theorem, etc.). I was surprised to find out how widely applicable this field is also in real-life problems and the elegant way the problems were solved here fascinated me. Due to this experience I might fancy a career in this field.

I made my mind up to apply to Pal Erdos Mathematical Talent-Support School and I got accepted. During the course of the 2016-17 school year I was eager to widen my knowledge at the lessons of the school and I made it to the strongest mathematical class of the school, the Olympiad preparation group.

I have never given up working hard on Olympiad style problems as well and so I ended up obtaining these results:

2017: OKTV (National Secondary School Competition) 19th place

2017: KoMaL 'B' (an online competition with 9 problems every month, up to IMO level) 16th place

2015: Arany Daniel National Maths Contest: 3rd prize

I was awarded a place at MBL (Maths Beyond Limits), an eleven-day maths camp this September, organised for the most talented students of Hungary, Slovakia, Poland and the Czech Republic. Apart from being introduced to more advanced topics (such as Topology and Group Theory), I discovered the pleasure of doing maths in a motivating international community. This experience strengthened my belief that a UK university with a thriving student community would be ideal for me.

I value being open to other study areas, my greatest interests apart from maths are Physics and Languages. My particular commitment to studying mechanics and modern physics also paid off in competition results:

2016: Szilard Leo National Modern Physics Competition 6th place

2015: Mikola Sandor National Physics Competition 9th place

I believe that my openness to application of maths in physics would prove to be beneficial during my studies and later on in my career. The fact that at Cambridge theoretical physics can be combined with applied mathematics holds a great opportunity for me to be able to carry on with studying physics.

For the last couple of years I have worked on improving my fluency in English to ensure my preparedness for a study in the UK. I sat the CAE exam, which I passed with the grade A.

Learning languages was always a great pleasure for me so besides English I studied German (I gained a B2 paper in it) and I also took an optional Latin course. I made it to the final of the Latin OKTV (27th position).

Outside school I sometimes play the viola and often read novels in different languages (I prefer classical literature). I attach great importance to doing sports, I go to the swimming-pool regularly. I am also a scout patrol leader. I spent my last summer in Canada where I got some valuable overseas experience and took care of my English skills.

I believe that my deep interest for mathematics along with an openness to its applications in other areas of study and my eagerness to discover other cultures would make me a flourishing student at Cambridge.