Istvan Kadar

ik338@cam.ac.uk +447784658699
Churchill College, Cambridge, CB3 0DS

EDUCATION

2020-present	PhD in Mathematics, University of Cambridge
2016-2020	Churchill College, University of Cambridge BA Mathematics, MMath
2017-2019	*Master courses*: Quantum field theory, General Relativity, Lie Algebras, Supersymmetry, Standard Model, String Theory, Differential Geometry, PDE analysis, Nonlinear PDEs *Third year 1.0:* Quantum Mechanics, Electrodynamics, Linear Analysis, Classical Dynamic, Differential Geometry, Statistical Physics, Representation theory, Quantum computation, Probability and measures, Algebraic Topology, Logic *Second year* 1.0: Analysis, Probability, Groups, Rings & Modules, Quantum Mechanics, Numerical Analysis, Electromagnetism, Linear Algebra, Optimisation, Fluid dynamics, Statistics
2016-2017	Natural Sciences First Year: 1.0 Subjects: Computer Sciences, Physics, Mathematics, Material Sciences
2004-2016 2016 June	ELTE Radnóti Miklós Secondary School, Budapest Grade 5 (best) in Physics Higher Level, Mathematics Higher Level, Chemistry Standard Level, Computer Science Standard Level

RESEARCH AND WORK EXPERIENCE

2018 Jul-Oct	*LBBW, London.* Used machine learning algorithms and other financial and mathematical methods to solve problems as: customer behaviour prediction, market behaviour forecasts to create active portfolio management and creating and testing risk assessment algorithms.
2017-2019	*Computational Project within the university*. The aim of these projects is to develop programmes to solve mathematical problems (ie. numerical differential equation solution, root finding, Percolation calculation, physical simulations).
2017 Summer	*Eötvös Loránd University, Department of Astrophysics.* To write extended N body simulations in Matlab and test cosmological ideas. Furthermore, find approximate solutions to arising non linear system of differential equations, and conserved quantities. To do research about what have been published in similar topics, and give presentations of them.
July 2016	*Young Physicist Tournament.* Earned silver medal for designing measurements to test complex physical systems such as holey sampled Van der Pauw method. Collaboration with academics from Eötvös Loránd University in problem solving. Give a presentation to international jury.
August 2015	*Summer internship at Wigner Research Centre of Physics*. Examine behaviour of a Gaussian wave packet with different potentials in two dimensions. Give analytic approximation using Fourier transform.
2014-2015	*School project on chaotic systems*. Develop a software to find attractors of a spring pendulum.

ORGANIZATIONAL AND EDUCATIONAL EXPERIENCE

2017 August	*Volunteering in China as part of a Scouting camp.* Preparing activities for Chinese children between the age 9 and 12, with 10 other volunteers. Hold one to one session where the they could talk about their experiences in the camp and had to prepare for presentations about them selves.

2017 - 2018	*Volunteering at STIMULUS, a teaching organisation.* Help teachers in local high schools once a week at maths classes, where special assistance is needed for students who are far behind with the material or who missed some parts of the course. Help during the exercise solving time students who were stuck with some parts of the material.
2015 November	*Organisation of physics camp*. Create measurements with quadratic approximations. Booking accommodation and organize lectures.
2014-2016	*During the last 4 years of secondary school (2013-6).* Leader for younger students which entailed programme organisation, from more monumental events (like a yearly 10 days long summer camp where I had to prepare many activities and competitive games) to everyday networking with the children.

HONOURS AND AWARDS

2018 June	Sir Peter and Lady Gershon Prize for best Mathematics result in year 2 in college.
2017 June	Anthony and Christina Kelly Prize in Materials Science and Metallurgy, for the best Natural Science exam in year 1 and 2 in college.
2017-2019 June	College Scholarship for achieving 1.0 qualification.
2016 June	Award for outstanding academic results at national and international competitions from ELTE Radnóti Miklós Secondary School.

OTHER SKILLS

Languages	Hungarian - Mother tongue English - Proficient French – Conversational
IT Skills	Experience in Java, Python, Matlab and ML programming.
General	I consider myself a steady worker, who meets his deadlines. I am member of the Cambridge Physics society and the Trinity Math society. Driving license. DBS check.

HOBBIES

I am part of the college football team. I do bouldering. Furthermore I have a passion for history.

REFEREES

Dr Claude Warnick (Supervisor)
c.m.warnick@maths.cam.ac.uk

Dr Harvey Reall (Advisor)
h.s.reall@damtp.cam.ac.uk