

# Curriculum Vitae

## PERSONAL

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Name: **Gergely Székely**  
Date of birth: 3rd October 1979  
Citizenship: Hungarian  
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Address: Lócsei út 24-26/C, H-1147, Budapest, Hungary  
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## EDUCATION

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2010 PhD (in mathematics), Eötvös Loránd University, Budapest  
Title: *First-Order Logic Investigation of Relativity Theory*  
Advisers: Hajnal Andréka and Judit X. Madarász  
2004-2007 PhD school, Eötvös Loránd University, Budapest  
2004 M.Sc. diploma (mathematician), Eötvös Loránd University, Budapest  
Title: *A First Order Logic Investigation of the Twin Paradox and Related Subjects*  
Advisers: István Németi and Judit X. Madarász  
1998-2004 Eötvös Loránd University, Budapest

## EMPLOYMENT

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2010- Research Fellow at Alfréd Rényi Institute of Mathematics  
2009- Assistant Professor at National University of Public Service  
(Zrínyi Miklós University of National Defence)  
2008-2010 Assistant Research Fellow at Alfréd Rényi Institute of Mathematics  
2008-2009 External Lecturer at Zrínyi Miklós University of National Defence  
2007-2009 External Lecturer at Technical University of Budapest

## LANGUAGE SKILL

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Hungarian mother tongue  
English intermediate level  
Italian elementary level

## RESEARCH

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Since 2003, I have been doing research on Logical Foundations of Relativity Theory in the Algebraic Logic Research Division of Alfréd Rényi Institute of Mathematics.

Supporting grants:

Hungarian Scientific Research Funds: K-73601, K-81188, PD-84093.  
Royal Society International Exchanges Scheme: IE110369.

I have more than 20 scientific publications. 4 book chapters and 9 papers in high quality peer reviewed international journals, such as Reports on Mathematical Physics, International Journal of Theoretical Physics, and Foundations of Physics.

## SELECTED TALKS AT INTERNATIONAL CONFERENCES

- 2013 “Operationality in the Axiomatic Foundations of Relativity Theory,”  
Foundations of Physics 2013, Ludwig-Maximilians-Universität, München, Germany.
- 2012 Tutorial on logical analysis of relativity theories I. & II.  
First International Conference on Logic and Relativity,  
MTA Alfréd Rényi Institute of Mathematics, Budapest, Hungary. (plenary)
- 2012 “Existence of Faster Than Light Signals Implies Hypercomputation Already in Special Relativity”  
Turing Centenary Conference, University of Cambridge, United Kingdom.
- 2011 “Closed Timelike Curves in Relativistic Hypercomputation,” Unconventional Computation 2011,  
HyperNet 2011: Hypercomputation workshop, Turku, Finland.
- 2010 “Axiomatization of Physics in a Logical Framework,”  
Physics and Computation 2010, On the Nile, Egypt. (invited, plenary)
- 2010 “Axiomatization of spacetime geometries,” Non-Euclidean Geometry and its Applications  
7-th Bolyai-Gauss-Lobachevsky Conference, Cluj-Napoca (Kolozsvár), Romania.
- 2009 “Relativistic Computation Tutorial,” Unconventional Computation 2009  
Hypercomputation Workshop, Azores, Portugal. (invited)
- 2008 “Reverse Thinking and Axiomatic Method in Foundations of Physics,”  
Trends in Logic VI, Brussels, Belgium.
- 2005 “Twin Paradox from first order logic point of view,”  
Logic in Hungary - 2005, Budapest, Hungary.
- 2002 “Clock paradox in model theoretical terms,”  
Logic, Algebra, Relativity - 2002, Budapest, Hungary.

## TEACHING

Eötvös Loránd University:

- 2013 Logical Foundations of Special Relativity (in English)  
2011, 2012 Introduction to algebra (in English)  
2005-2006 Mathematical Analysis

National University of Public Service / Zrínyi Miklós University of National Defence:

- 2008- Mathematics I, Mathematics M II, Mathematics M III, Mathematics MKE IV,  
Applied Mathematics, Probability theory, etc.

Technical University of Budapest:

- 2007-2009 Mathematics A1b, Mathematics A2b, Mathematics A3

### *Advising*

- I am a PhD supervisor of Attila Molnár, who works on Modal logic foundations of relativity theories.
- I was an adviser of Ramón Horváth, who have won second prize with his paper “An Alexandrov-Zeeman type theorem and its consequences” at the faculty TDK conference of 2006 and third prize at the national TDK conference of 2007.