

Curriculum Vitae — Tamás Görbe

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Contact details

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Employment

10/2021 -	Assistant Professor	—	Bernoulli Institute, University of Groningen
09/2020 - 08/2021	Academic Development Fellow	}	School of Mathematics, University of Leeds
09/2018 - 08/2020	Marie Curie Research Fellow		
01/2018 - 08/2018	Assistant Professor	}	Department of Theoretical Physics, University of Szeged
12/2017 - 07/2017	Research Fellow		
09/2016 - 06/2017	Predoctoral Research Fellow		

Education

2013 - 2016 **PhD in Mathematical Physics**, University of Szeged
Thesis: *Integrable many-body systems of Calogero-Ruijsenaars type*
Doctoral advisor: László Fehér

2011 - 2013 **MSc in Applied Mathematics**, University of Szeged
Thesis: *Group-theoretic treatment of integrable systems*

2007 - 2011 **BSc in Mathematics**, University of Szeged
Thesis: *Lie groups and related algebraic structures*

Research Interests Mathematical Physics; Integrable Systems

Grants

12/2020 - **Hungarian Scientific Research Fund (OTKA)** Grant no. K-134946
11/2024 *Applications of Integrable Quantum Field Theories*
Type: Research Grant | Role: **Co-I** | PI: Zoltán Bajnok
Value: HUF 45,782,000 (\approx €130,224)

09/2018 - **Marie Skłodowska-Curie Individual Fellowship (MSCA-IF)** Project acronym: INTSYS
08/2020 *Algebraic, Geometric, and Field-theoretic Aspects of Integrable Many-Body Systems*
Type: Fellowship | Role: **PI** | PI: Tamás Görbe
Value: €195,454.80

09/2016 - **New National Excellence Programme (ÚNKP)** Grant no. ÚNKP-16-3
06/2017 *Geometric and field-theoretic aspects of integrable systems*
Type: Fellowship | Role: **PI** | PI: Tamás Görbe
Value: HUF 3,500,000 (\approx €10,000)

09/2014 - **Hungarian Scientific Research Fund (OTKA)** Grant no. K-111697
08/2018 *Group-theoretic aspects of integrable systems and their dualities*
Type: Research Grant | Role: **Co-I** | PI: László Fehér
Value: HUF 6,670,000 (\approx €19,000)

03/2013 - **National Excellence Programme (NKP)** Grant no. A2-ELMH-12-0027
01/2014 *The trigonometric $BC(n)$ Sutherland system and its action-angle dual*
Type: Fellowship | Role: **PI** | PI: Tamás Görbe
Value: HUF 1,000,000 (\approx €2,850)

07/2009 - **Hungarian Scientific Research Fund (OTKA)** Grant no. K-77400
12/2013 *Integrable many-body and field-theoretic models*
Type: Research Grant | Role: **Student participant** | PI: László Fehér
Value: HUF 14,656,000 (\approx €41,750)

Scientific Societies: Public body of the Hungarian Academy of Sciences • European Mathematical Society • János Bolyai Mathematical Society • London Mathematical Society • Royal Dutch Mathematical Society • Roland Eötvös Physical Society

Acted as Referee/Reviewer for: Géza Györgyi Award - Wigner RCP • Journal of Mathematical Analysis and Applications • Journal of Nonlinear Mathematical Physics • Letters in Mathematical Physics • Mathematical Physics, Analysis and Geometry • Symmetry, Integrability and Geometry (SIGMA) • EPSRC • Mathematical Reviews • Zentralblatt MATH

• External examiner for the PhD of Tamás Gombor (Budapest). Thesis title: Integrable Boundary Sigma Models

Teaching Experience

Teaching duties in the academic year 2023/2024:

Calculus 1 • Calculus 1 (for Physics) • Calculus 2 (for Physics) • Integrable Systems

Undergraduate Level (BSc)

Calculus 1 • Calculus 2 • Calculus and Mathematical Analysis • Calculus for LST • Linear Algebra for Physicists • Linear Differential Equations and Transforms • Mathematical Methods in Physics 1 • Mathematical Methods in Physics 2 • Numbers and Vectors (Precalculus) • Selected Topics in Mathematical Physics

Advanced Level (MSc)

Analytical Mechanics • Application of Symbolic Languages in Physics • Group Theory in Physics • Integrable Systems • Lie Groups • Selected Topics in Mathematical Physics • Statistical Mechanics

Doctoral Level (PhD)

Classification of Simple Lie Algebras • Random Matrix Theory • Quantum Integrability

Service

- Lecturer in the "Introduction to Integrability" Online Lecture Series (London Mathematical Society)
- Local organizer of the Royal Institution Masterclasses (School of Mathematics, University of Leeds)
- Organizer of the "Algebra, Geometry and Integrable Systems" Colloquium Series (University of Leeds)
- Co-organizer of the "Integrable Systems" Seminar Series (University of Leeds)
- Co-organizer of the Leeds European Study Group with Industry (ESGI162)
- Co-organizer of the Study Group Mathematics with Industry 2023 (University of Groningen)
- Co-organizer of the Imaginary Exhibition 2023 (University of Groningen)
- Member of the Programme Committee Mathematics and Applied Mathematics (University of Groningen)

Outreach

- Social media: Mathematics and science communication via twitter (twitter.com/TamasGorbe)
- Social media: Videos on Mathematics on my YouTube channel (youtube.com/user/TamasGorbe)
- Public lecture: *An Elementary Derivation of Kepler's Laws of Planetary Motion* via YouTube
- Public lecture: *Enchanting Symmetries, the Gems of Maths* as part of a TV series called Everyone's Academy
- Public lecture: *Symmetry as a tool – from Planets to Particles* in the "Szabadegyetem – Szeged" lecture series
- Workshops at secondary schools across Yorkshire as part of the Leeds Festival of Science, University of Leeds
- SciArt Exhibition *Exceptionally Beautiful Symmetries* – String Art (tamasgorbe.com/symmetry)
- Technasium Keuzecollege (vwo) Project

Awards & Honours & Fellowships

2023 *Teacher of the Year*, (Applied) Physics, University of Groningen

2023 *Best Practice in Teaching & Learning Award*, 2nd prize, University of Groningen

2019 *MSCA Fellow of the Week*, Marie Skłodowska-Curie Actions

- 2019 *Academic Development Fellowship*, School of Mathematics, University of Leeds
- 2019 *Brain Star Series*, European Researchers' Night, Hungary
- 2019 *30 under 30 / Science*, Forbes magazine, Hungary
- 2018 *Pro Laudanda Promotio Award*, PhD research of outstanding quality, University of Szeged, Hungary
- 2017 *Gyula Farkas Memorial Award*, János Bolyai Mathematical Society, Hungary
- 2017 *50 Talented Young Hungarians*, La femme magazine, Hungary (<http://lafemme.hu/tehetseg>)
- 2016 *Junior Templeton Fellowship*, Hungarian Templeton Program (<http://templetonprogram.hu/en>)
- 2016 *List of Excellence* – Silver degree among PhD students, University of Szeged
- 2015 *3rd prize*, Scientific Competition, Hungarian Academy of Sciences
- 2015 *List of Excellence* – Bronze degree among PhD students, University of Szeged
- 2013 *Excellent Student of Faculty*, Faculty of Science and Informatics, Uni. of Szeged
- 2013 *Special Award*, XXXI. National Scientific Students' Associations Conference, Budapest, Hungary
- 2012 *1st prize*, Scientific Students' Associations Conference, Szeged, Hungary