Curriculum Vitae

Personal details

Name	Takács, Gábor
Position	Full professor Head of BME “Momentum” Statistical Field Theory Research Group
Institute	Department of Theoretical Physics Budapest University of Technology and Economics H-1111 Budapest, Budafoki út 8.
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Employment

1992-1993	Institute for Theoretical Physics, Eötvös University Research assistant with scholarship of the Scientific Qualification Committee (TMB), Hungarian Academy of Sciences
1993-1996	HAS-Eötvös Theoretical Physics research group, Eötvös University assistant research fellow
1996-1997	HAS-Eötvös Theoretical Physics research group, Eötvös University, Budapest research fellow
1997-1999	Theory Group of INFN Sezione di Bologna postdoctoral fellow
1999-2001	Department of Mathematics, King's College London postdoctoral fellow
2001-2002	Institute for Theoretical Physics, Eötvös University Magyary Zoltán postdoctoral fellow
2002-2005	Institute for Theoretical Physics, Eötvös University OTKA postdoctoral fellow
2005-2010	HAS-Eötvös Theoretical Physics research group, Eötvös University senior research fellow
2010-2012	HAS-Eötvös Theoretical Physics research group, Eötvös University scientific advisor
2012-2014	Institute of Physics, Budapest University of Technology and Economics scientific advisor
2012-2017	MTA-BME "Momentum" Statistical Field Theory Research Group scientific advisor, head of group
2014-	Department of Theoretical Physics, Budapest University of Technology and Economics full professor
2017-	BME "Momentum" Statistical Field Theory Research Group head of group

Education

1983-1987	Katona József Gimnázium, Kecskemét (secondary grammar school) National Secondary School Competition (OKTV) mathematics: 9th (1986), 3rd (1987) chemistry: 10th (1987) International Chemistry Olympiade, 1987: silver medal
1987-1992	Eötvös University, Budapest, Faculty of Sciences, M.Sc. course in physics
1991-1992	Republican Scholarship of Hungarian Republic
1992	Diploma (M.Sc.) in physics with distinction Diploma work topic: Conformal Field Theory Supervisor: Prof. Zalán Horváth, Institute for Theoretical Physics Thesis: "Investigation of classical A_2 Toda field theory"
1992-1993	Scholarship of the Scientific Qualification Committee (TMB), Hungarian Academy of Sciences
1993-1995	Ph.D. student and research assistant, Eötvös University, Institute for Theoretical Physics Research topic: Two Dimensional Integrable Field Theories Supervisor: Prof. Zalán Horváth
1994-1996	Member of Bolyai College, Eötvös University
1995-1996	Visiting research student at Dept. of Applied Mathematics and Theoretical Physics (DAMTP) University of Cambridge, Cambridge, UK Member of Darwin College Supervisor: Dr. G. M. T. Watts (until March, 1996), Dr. J. M. Evans (from March, 1996) Research topic: Integrable and Conformal Field Theories
1996	Certificate of Proficiency in English, grade "A"

Academic degrees

1996	Ph.D. from Eötvös University with the result "Summa cum laude" Thesis: "Free field representation for the form factors of the O(3) nonlinear sigma model and its generalizations"
2005	Habilitation (dr. habil) from Eötvös University
2008	Doctor of the Hungarian Academy of Sciences (DSc) DSc thesis: "Finite size effects in quantum field theory"

Scholarships, fellowships and prizes

1995-1996	Scholarship of the Cambridge Overseas Trust
1997-1999	INFN postdoctoral fellowship Theory Group of INFN Sezione di Bologna
1999-2001	PPARC postdoctoral fellowship Department of Mathematics, King's College London
2001-2002	Magyary Zoltán postdoctoral fellowship, Foundation for Hungarian Higher Education and Research,

	Hungarian Ministry of Education Eötvös University, Institute for Theoretical Physics
2002-2005	Széchenyi István scholarship, Hungarian Ministry of Education
2002-2005	OTKA postdoctoral fellowship Eötvös University, Institute for Theoretical Physics
2003	Academy Prize for young researchers, Hungarian Academy of Sciences
2005-2008	Bolyai János research scholarship, Hungarian Academy of Sciences
2008	Novobátzky prize, Eötvös Loránd Physical Society
2017	BME's most significant scientific publication 2016 M. Kormos, M. Collura, G. Takács and P. Calabrese, *Nature Physics* **13**: pp. 246-249 (2017, online advanced publication: 2016)
2018	BME's most outstanding scientific publication 2013-2017 B. Pozsgay, M. Mestyán, M.A. Werner, M. Kormos, G. Zaránd and G. Takács, *Physical Review Letters* **113**:(11) Paper 117203 (2014)
2020	Academy Prize, Hungarian Academy of Sciences

Membership and roles in professional organizations

2000-	Eötvös Loránd Physics Society
2001-2004	Chairman of the Particle Physics Section of the Eötvös Loránd Physics Society
2004-2007	Secretary of the Particle Physics Section of the Eötvös Loránd Physics Society
2006-2010	Physics panel of the Hungarian Scientific Research Fund
2008-2009	Council of Research Units of the Hungarian Academy of Sciences
2008-2010	Council of the Research Network of the Hungarian Academy of Sciences
2008-2011	Secretary of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2008-	Young Researchers' Council of the Hungarian Academy of Sciences Coordinator of the physical sciences section (2008-2010)
2011-2014	Chairman of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2014-2017	Deputy chairman of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2014-	Supervisory Committee of Bolyai College Foundation
2017-	Committee on Statistical Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2018-	Editorial Board of Fizikai Szemle (monthly journal of Eötvös Loránd Physics Society)

University organisation: roles and responsibilities

2014-2017	ELTE Physics Habilitation Committee
2014-	BME Physics Doctoral School Council
2014-	BME Physics Habilitation and Doctoral Council
2014-	BME Faculty of Science Council
2015-	Secretary of BME Physics Education Committee
2015-2020	Deputy director (education), BME Institute of Physics
2017-	ELTE Science Faculty Habilitation Council

2020- Head of BME Physics Doctoral School

Other professional activities

2003-2009 Tutor of the physics section of Bolyai College

Grants (as principal investigator)

2001-2003 FKFP 0043/2001 research grant
Integrable and conformal field theories, dynamical symmetries and their applications

2002-2005 OTKA D42209 postdoctoral grant
Nonperturbative investigation of two-dimensional quantum field theories

2008 NKTH Apponyi Albert (Mecenatúra) grant BOMMRG08
Organization of "Renormalization Group" Bolyai intensive course

2008-2012 OTKA K75172 research grant
Correlation functions and finite size effects in two-dimensional quantum field theories

2012-2017 LP2012-50/2012 "Momentum" grant of the Hungarian Academy of Sciences
Statistical Field Theory in Condensed Matter
(MTA-BME "Momentum" Statistical Field Theory Research Group)

2013-2015 FP7-PEOPLE-2012-IIF (Marie Curie) grant
Project number 330076 *"Quantum Quench"*
Role: scientist-in-charge, fellow: Márton Kormos

2013-2015 MTA-CNR Mobility Grant SNK-84/2013

2014-2016 MTA Postdoctoral Grant
Role: supervisor, fellow: Tamás Pálmai

2016-2020 NKFIH K2016 grant no. 119204
Dynamics of Strongly Correlated Quantum Systems

2022-2026 NKFIH ANN2022 grant no. 138606
Realising and probing quantum fields with ultra-cold atoms (QuFT-Lab)

Organization of schools and conferences

International conferences and schools

2003 EUCLID 2003 Summer School on
Nonperturbative methods in low dimensional integrable models
Organizer

2004 6th Bologna Workshop on *CFT and Integrable Models*
Member of Scientific Board

2006 7th Bologna Workshop *on CFT and Integrable Models*
Member of Scientific Board

2008 Bolyai Intensive Course on *Renormalization Group Methods in Physics*
Principal organizer

2010 Workshop on *Time-dependent dynamics and non-equilibrium quantum systems*
Organizer

2011 35th Johns Hopkins Workshop on *AdS/CFT and its Applications*
Organizer
2012 Zalán Horváth Memorial Workshop
Organizer
2014 Workshop on *Finite-size Technology in Low Dimensional Quantum Systems* (VII) + Conference on *Integrability in Low Dimensional Quantum Systems*
Organizer

Organizer of Hungarian Summer Schools on Theoretical Physics

1997 Nonperturbative results in supersymmetric gauge theories
2002 New developments in gauge theories, gravitation and strings
2004 Cosmology
2005 QCD 2005
2006 Experiments and Einstein's theory of gravitation
2007 Physics at the LHC

Participation at international schools

1992 Winter School on Nuclear and Particle Physics, Schladming, Austria
1992 Eötvös Graduate School on "Selected Topics on Quark Confinement", Budapest, Hungary
1993 International School on Astroparticle Physics,
Budapest, Hungary
1994 XXXth Karpacz Winter School on "Quantum Groups"
Karpacz, Poland
1994 Spring School and Workshop on String Theory, Gauge Theory and Quantum Gravity
International Center for Theoretical Physics, Trieste, Italy
1995 Spring School and Workshop on String Theory, Gauge Theory and Quantum Gravity
International Center for Theoretical Physics, Trieste, Italy
1995 Les Houches Summer School in Theoretical Physics
Session LXIV on "Quantum Symmetries" Les Houches, France
1997 Spring School on String Theory, Gauge Theory and Quantum Gravity
International Center for Theoretical Physics, Trieste, Italy
1999 Spring Workshop on String Theory and Related Matters
International Center for Theoretical Physics, Trieste, Italy
2001 Summer School on Low Dimensional Quantum Systems
International Center for Theoretical Physics, Trieste, Italy