CURRICULUM VITAE of Márton Kormos

PERSONAL INFORMATION

Name:	Dr. Márton Kormos
Date and place of birth:	27 November 1979, Debrecen, Hungary
Family status:	married (2 children)
Nationality:	Hungarian
Institute Address:	MTA-BME "Momentum" Statistical Field Theory Research Group
	Budapest University of Technology and Economics
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EDUCATION

2003–2006	Ph.D. student Physics at the Department of Theoretical Physics, Eötvös Loránd University, Budapest
2002	Erasmus student at the University of Copenhagen
1998–2003	member of Bolyai College, Budapest
1998–2003	undergraduate student and M.Sc. degree in Physics Eötvös Loránd University, Budapest

EMPLOYMENT AND EXPERIENCE

2016–	"Prémium" Postdoctoral Fellow of the Hungarian Academy of Sciences
2015–2016	Research fellow at the Budapest University of Technology and Economics
2013–2015	Marie Curie fellow at the Budapest University of Technology and Economics
2012–2013	Postdoctoral Researcher at the University of Pisa (supervisor: Pasquale Calabrese)
2010–2012	Welch Postdoctoral Research Associate at Rice University, Houston (supervisor: Adilet Imambekov)
2008–2010	Postdoctoral Research Fellow at SISSA, Trieste (supervisor: Giuseppe Mussardo)

2007–2008	Early Stage Research Fellow at King's College, London
	(supervisor: Gerard Watts)
2003–2007	Graduate research at the
	Department of Theoretical Physics, Eötvös Loránd University, Budapest
	(supervisor: Gábor Takács)
2002	Undergraduate research at the Niels Bohr Institute, Copenhagen
	(supervisor: Paolo Di Vecchia)
2001–2003	Undergraduate research at the Eötvös Loránd University, Budapest
	(supervisor: László Palla and Gábor Takács)

TEACHING EXPERIENCE

Tutoring in *Mechanics, Electrodynamics, Quantum Mechanics, Particle Physics,* and *Quantum Field Theory* at Eötvös Loránd University and Budapest University of Technology and Economics

Lecture series on the integrability of the XXZ spin chain at the *Winter Ph.D. School on Statistical Field Theories* held at the GGI in Florence

ACADEMIC HONORS, GRANTS, MEMBERSHIPS

2016	"Prémium" postdoctoral fellowship (29,720,000 HUF)
	"Lajos Jánossy" Prize by the Eötvös Loránd Physical Society
2015	"János Bolyai" Career Fellowship of the Hungarian Academy of Sciences
	(4,482,000 HUF)
2012	Marie Curie IIF Research Fellowship (€144,180)
2010–2011	Member of the American Physical Society
2007–2013	Junior Member of the Isaac Newton Institute for Mathematical Sciences, Cambridge
2003	National Student Research Conference, 1st prize
2001	Undergraduate Scholarship of the Republic of Hungary

REFEREE of

Physical Review Letters, Physical Review A, Physical Review B, Journal of Statistical Mechanics, Journal of Physics A, Nuclear Physics B

SCIENTIFIC OUTPUT

Total number of papers: 28 (26 published)
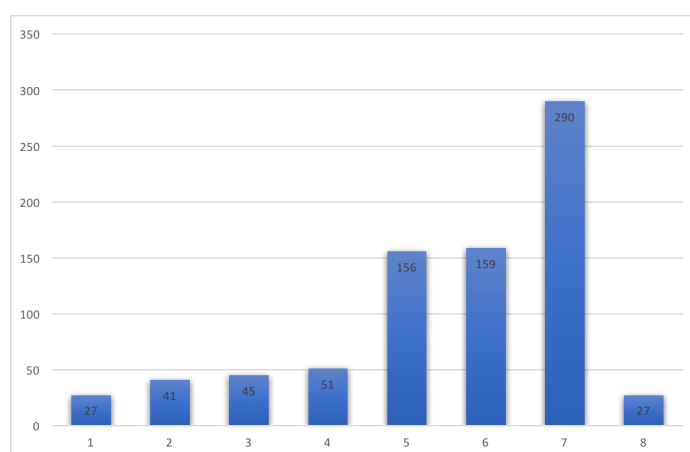
Total number of citations: 816

Current average citations per year: ≈ 250

12 invitations at international meetings

h-index: 15

Cumulative impact factor of all publications: 112.514

Citations received

(Source: Google Scholar)

LANGUAGES

Hungarian (native), English (working), Italian (writing), Spanish (reading)

MENTORING

Jianda Wu (Ph.D., Rice University)

Leda Bucciantini (Ph.D., University of Pisa)

Márton Mestyán (M.Sc., Budapest University of Technology and Economics)

Tibor Rakovszky (M.Sc., Budapest University of Technology and Economics
M.Sc. 2016, joint supervisor with Gábor Takács)

PARTICIPATIONS AT CONFERENCES AND WORKSHOPS

2016   *New Trends in Low-Dimensional Physics: Quantum Integrability and Applications*,
Chinese Academy of Sciences, Beijing (talk)

ICFT 2016 – UK Meeting on Integrable and Conformal Field Theory,
King's College London (talk)

New approaches to non-equilibrium and random systems,
KPZ integrability, universality, applications and experiments (program),
KITP Santa Barbara (**invited talk**)

Mathematical Aspects of Quantum Integrable Models in and out of Equilibrium (program),
Cambridge (**invited talk**)

2015   *Beyond Integrability*, Montreal (**invited talk**)

2014   *Entanglement Entropy in Many Body Quantum Systems*, London

Finite-Size Technology in Low-Dimensional Quantum Systems (VII), Budapest
(**invited talk**)

Winter Ph.D. School on Statistical Field Theories, Florence (**invited lecture series**)

Quantum Integrability, Conformal Field Theory and Topological Quantum Computation,
Natal (**invited talk**)

Emergent Phenomena in the Dynamics of Quantum Matter, New York (**invited talk**)

*School on Non-linear Dynamics, Dynamical Transitions and Instabilities in
Classical and Quantum Systems*, Trieste (**invitation**)

Mathematical physics of non-equilibrium quantum systems, London

2013   *Quantum Many Body Systems out of Equilibrium*, Dresden

Amsterdam Summer Workshop on Low-D Quantum Condensed Matter, Amsterdam
(**invited talk**)

2012   *Low-Dimensional Quantum Gases out of Equilibrium*, Minneapolis

The Beauty of Integrability, Natal (**invited talk**)

Frontiers of Quantum Condensed Matter Physics, New York

2011   *Quantum Quenches and Strongly Correlated Physics*, Montauk (Brookhaven NL)

2010   *Time-Dependent Dynamics and Non-Equilibrium Quantum Systems*, Budapest

Finite-Size Technology in Low-Dimensional Quantum Systems (V), Benasque
(**invited talk**)

2009 *Summer School on AdS/CFT and its Applications*, Tihany (**invited talk**)
   Summer College on Nonequilibrium Physics from Classical to Quantum
   Low Dimensional Systems, Trieste
   13th Annual UK Meeting on Integrable Models, Conformal Field Theory
   and Related Topics, Oxford

2008 *12th Annual UK Meeting on Integrable Models, Conformal Field Theory*
   and Related Topics, Edinburgh

2007 *Integrability and the gauge/string correspondence*, Cambridge

2006 *Bologna Workshop on CFT and Integrable Models*, Bologna (**talk**)

2005 *EUCLID Trieste Spring School*, Trieste

PUBLICATIONS IN REFEREED JOURNALS

1. **M. Kormos** and Z. Zimborás: *Temperature driven quenches in the Ising model: appearance of negative Rényi mutual information,*
   https://doi.org/10.1088/1751-8121/aa70f6
   invited contribution to the special issue "Emerging Talents" of Journal of Physics A

2. **M. Kormos**, M. Collura, G. Takács, and P. Calabrese: *Real time confinement following a quantum quench to a non-integrable model,* Nature Physics **13**, 246 (2017)

3. T. Rakovszky, M. Mestyán, M. Collura, **M. Kormos**, and G. Takács: *Hamiltonian truncation approach to quenches in the Ising field theory,* Nucl. Phys. B **911**, 805 (2016)

4. **M. Kormos** and G. Zaránd: *Quantum quenches in the sine–Gordon model: a semiclassical approach,* Phys. Rev. E **93**, 062101 (2016)

5. P. P. Mazza, M. Collura, **M. Kormos**, and P. Calabrese: *Interaction quench in a trapped 1D Bose gas,* J. Stat. Mech. P11016 (2014)

6. **M. Kormos**, L. Bucciantini, and P. Calabrese: *Stationary entropies after a quench from excited states in the Ising chain,* Europhys. Lett. **107**, 40002 (2014); selected for the EPL "Highlights from the previous volumes", Europhys. Lett. **109**, 00000 (2015)

7. B. Pozsgay, M. Mestyán, M. A, Werner, **M. Kormos**, G. Zaránd, and G. Takács: *Correlations after Quantum Quenches in the XXZ Spin Chain: Failure of the Generalized Gibbs Ensemble,* Phys. Rev. Lett. **113**, 117203 (2014)

8. P. Calabrese, **M. Kormos**, and P. Le Doussal: *From the sine–Gordon field theory to the Kardar–Parisi–Zhang growth equation,* Europhys. Lett. **107**, 10011 (2014)

9. J. Wu, **M. Kormos**, and Q. Si: *Finite-Temperature Spin Dynamics in a Perturbed Quantum Critical Ising Chain with an E_8 Symmetry,*
   Phys. Rev. Lett. **113**, 247201 (2014)

10. L. Bucciantini, **M. Kormos**, and P. Calabrese: *Quantum quenches from excited states in the Ising chain,* J. Phys. A **47**, 175002 (2014)

11. M. Collura, **M. Kormos**, and P. Calabrese: *Stationary entanglement entropies following an interaction quench in 1D Bose gas,* J. Stat. Mech. (2014) P01009

12. **M. Kormos**, M. Collura, and P. Calabrese: *Analytic results for a quantum quench from free to hard-core one dimensional bosons,* Phys. Rev. A **89**, 013609 (2014)

13. **M. Kormos**, A. Shashi, Y.-Z. Chou, J.-S. Caux, and A. Imambekov: *Interaction quenches in the 1D Bose gas,* Phys. Rev. B **88**, 205131 (2013)

14. B. Pozsgay, W.-V. van Gerven Oei, and **M. Kormos**: *On form factors in nested Bethe Ansatz systems,* J. Phys. A **45**, 465007 (2012)

15. **M. Kormos**, Y.-Z. Chou, and A. Imambekov: *Exact three-body local correlations for excited states of the 1D Bose gas*, Phys. Rev. Lett. **107**, 230405 (2011)

16. **M. Kormos**, G. Mussardo, and A. Trombettoni: *Local correlations in the super Tonks–Girardeau gas*, Phys. Rev. A **83**, 013617 (2011)

17. **M. Kormos**, G. Mussardo, and B. Pozsgay: *Bethe Ansatz matrix elements as non-relativistic limits of quantum field theory form factors*, J. Stat. Mech. P05014 (2010)

18. **M. Kormos** and B. Pozsgay: *One-point functions in massive integrable QFT with boundaries*, JHEP**04**, 112 (2010)

19. **M. Kormos**, G. Mussardo, and A. Trombettoni: *1D Lieb–Liniger Bose gas as non-relativistic limit of the sinh–Gordon model*, Phys. Rev. A **81**, 043606 (2010)

20. S. Fagnocchi, S. Finazzi, **M. Kormos**, S. Liberati, and A. Trombettoni: *Relativistic Bose–Einstein condensates: a new system for analogue models of gravity*, New J. Phys. **12**, 095012 (2010)

21. **M. Kormos**, G. Mussardo, and A. Trombettoni: *Expectation values in the Lieb–Liniger Bose gas*, Phys. Rev. Lett. **103** 210404 (2009), selected for the Virtual Journal of Atomic Quantum Fluids **1**, Issue 6

22. **M. Kormos**, I. Runkel, and G. M. T. Watts: *Defect flows in minimal models*, JHEP**11** 057 (2009)

23. **M. Kormos** and G. Takács: *Boundary form factors in finite volume*, Nucl. Phys. B **803**, 277 (2008)

24. **M. Kormos**: *Boundary renormalisation group flows of the supersymmetric Lee–Yang model and its extensions*, Nucl. Phys. B **772/3**, 227 (2007)

25. **M. Kormos**: *Boundary renormalisation group flows of unitary superconformal minimal models*, Nucl. Phys. B **744**, 358 (2006)

26. **M. Kormos** and L. Palla: *Some semiclassical issues in boundary sine–Gordon model*, J. Phys. A **35**, 5471 (2002)

MANUSCRIPTS UNDER REVIEW

M. Kormos: *Inhomogeneous quenches in the transverse field Ising chain: scaling and front dynamics*, arXiv:1704.03744

P. Moca, **M. Kormos**, and G. Zaránd: *Semi-semiclassical theory of quantum quenches in one dimensional systems*, arXiv:1609.00974