

ÁKOS NAGY

CURRICULUM VITÆ

Last updated on December 10, 2017

Personal Information

PLACE AND DATE OF BIRTH: Szekszárd, Hungary | April 8, 1986

CITIZENSHIP: Hungarian

WEBSITE: akosnagy.com

PROFESSIONAL MAILING ADDRESS: Department of Mathematics

Duke University

120 Science Drive

Durham, North Carolina

USA 27708

Education

- Ph.D. in Mathematics, Michigan State University, 2016

Advisor: Thomas H. Parker

- M.Sc. in Mathematics, Budapest University of Technology, 2011

Advisor: András I. Stipsicz

- M.Sc. in Physics, Budapest University of Technology, 2010

Advisor: Gábor Etesi

Appointments

Current

- William W. Elliott Assistant Research Professor, Duke University

January 1, 2018 – June 30, 2020

Postdoc mentors: Mark Stern and Robert Bryant

Past

- Fields Postdoctoral Fellow, Fields Institute/University of Waterloo

July 1, 2017 – December 31, 2017

Postdoc mentor: Spiro Karigiannis

- Postdoctoral Fellow, University of Waterloo

July 1, 2016 – June 30, 2017

Postdoc mentor: Benoit Charbonneau

Other

- Visitor, Simons Center for Geometry and Physics
May 11, 2017 – June 11, 2017
Program: Mathematics of topological phases of matter
- Associate Postdoctoral Researcher, Perimeter Institute
July 1, 2016 – June 30, 2017

Papers

Published

- [3] **Ákos Nagy:** Irreducible Ginzburg–Landau fields in dimension 2, *The Journal of Geometric Analysis* (2017)
[ARXIV:1607.00232 | DOI:10.1007/s12220-017-9890-4]
- [2] **Ákos Nagy:** The Berry connection of the Ginzburg–Landau vortices, *Communications in Mathematical Physics*, 350(1), 105-128 (2017)
[ARXIV:1511.00512 | DOI:10.1007/s00220-016-2701-0]
- [1] **Gábor Etesi and Ákos Nagy:** S-duality in Abelian gauge theory revisited, *Journal of Geometry and Physics* 61, 693-707 (2011)
[ARXIV:1005.5639 | DOI:10.1016/J.GEOMPHYS.2010.12.007]

Preprints

- **Ákos Nagy and Gonçalo Oliveira:** From vortices to instantons on the Euclidean Schwarzschild manifold, *submitted (2017)*
[ARXIV:1710.11535]

In preparation

- **Benoit Charbonneau and Ákos Nagy:** Monopoles with non-maximal symmetry breaking
- **Ákos Nagy and Nuno Romão** The geometry of non-linear vortex moduli spaces
- **Ákos Nagy:** Concentrating Majorana spinors on Riemannian manifolds

Invited talks

17. Rényi Institute, Algebraic Geometry and Differential Topology Seminar, December 15, 2017
16. *CMS Winter Meeting* (conference), University of Waterloo, December 8-11, 2017
15. Perimeter Institute, Mathematical Physics Seminar, December 4, 2017
14. University of Waterloo, Geometry and Topology Seminar, December 1, 2017
13. Michigan State University, Institute for Mathematical and Theoretical Physics, Mathematical Physics and Gauge Theory Seminar, October 3, 2017

12. The Fields Institute, *Thematic Program on Geometric Analysis* — Postdoctoral Seminar, August 17, 2017
11. *Mathematical Congress of the Americas* (conference), Montréal, July 24-28, 2017
10. *The Sen Conjecture and Beyond* (conference), UCL, June 19-23, 2017
9. *Mathematics of topological phases of matter* (thematic program), Simons Center for Geometry and Physics, May 23, 2017
8. Caltech, Noncommutative Geometry Seminar, March 8, 2017
7. CIRGET UQAM, Geometry and Topology Seminar, February 24, 2017
6. University of Waterloo, Geometry and Topology Seminar, September 23, 2016
5. McMaster University, Geometry and Topology Seminar, September 16, 2016
4. *AMS Fall Eastern Sectional Meeting* (conference), Rutgers University, November 14-15, 2015
3. Budapest University of Technology, Geometry Seminar, December 16, 2014
2. *Algebra, Geometry, and Mathematics Physics VI* (conference), Tjärnö, October 25-30, 2010
1. Institute for Particle and Nuclear Physics, Wigner Research Centre for Physics, Theoretical Physics Seminar, March 12, 2010

Awards and Scholarships

DISSERTATION COMPLETION FELLOWSHIP AWARD, MSU, 2016

DOUGLAS A. SPRAGG ENDOWED FELLOWSHIP IN MATHEMATICS AWARD, MSU, 2015

DISSERTATION CONTINUING FELLOWSHIP AWARD, MSU, 2015

HERBERT T. GRAHAM SCHOLARSHIP AWARD, MSU, 2014

DR. PAUL & WILMA DRESSEL ENDOWED SCHOLARSHIP AWARD, MSU, 2013

SCHOLARSHIP OF THE HUNGARIAN REPUBLIC, 2008

Supervised students

1. Christopher Lang, University of Waterloo, Winter 2017. Supported by departmental USRA and co-supervised with Benoit Charbonneau.

Languages

HUNGARIAN: Native

ENGLISH: Fluent

Other skills

TEX: Pretty good

CODING IN C: Okayish

KRAV MAGA: Passed Level 2 Exam (CT 707)

HARMONICA: Beginner