

# ÁKOS NAGY

## CURRICULUM VITÆ

Last updated on May 24, 2018

### Personal Information

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

CITIZENSHIP: Hungarian

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PROFESSIONAL MAILING ADDRESS: Department of Mathematics  
Duke University  
120 Science Drive, Durham  
North Carolina, 27708-0320

### Education

- Ph.D. in Mathematics, Michigan State University, May 2016  
Advisor: Thomas H. Parker
- M.Sc. in Mathematics, Budapest University of Technology, July 2011  
Advisor: András I. Stipsicz
- M.Sc. in Physics, Budapest University of Technology, July 2010  
Advisor: Gábor Etesi

### Appointments

- William W. Elliott Assistant Research Professor, Duke University (January 1, 2018–present)  
Postdoc mentors: Mark Stern and Robert Bryant
- Fields Postdoctoral Fellow, Fields Institute/University of Waterloo (July 1, 2017–December 31, 2017)  
Postdoc mentor: Spiro Karigiannis

- 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)
- Postdoctoral Fellow, University of Waterloo (July 1, 2016–June 30, 2017)  
Postdoc mentor: Benoit Charbonneau

## Papers

- [4] **Ákos Nagy and Gonalo Oliveira:** *From vortices to instantons on the Euclidean Schwarzschild manifold*, submitted (2017)  
[ ARXIV:1710.11535 ]
- [3] **Ákos Nagy:** *Irreducible Ginzburg–Landau fields in dimension 2*, *The Journal of Geometric Analysis*, Volume 28, Issue 2, 1853–1868 (2018)  
[ 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 ]

## Invited talks

### Future

20. *Geometry and Physics of Gauge Theories at Infinity* (conference), Saskatoon, Saskatchewan, August 3–6, 2018
19. *SIAM Annual Meeting 2018, Quantum Dynamics Minisymposium* (conference), Portland, Oregon, July 9–13, 2018

### Past

18. Duke University, Geometry and Topology Seminar, February 26, 2018
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. Postdoctoral Seminar of the *Thematic Program on Geometric Analysis*, Fields Institute, 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, Hungarian Academy of Sciences, Theoretical Physics Seminar, March 12, 2010

## Awards and Scholarships

AMS–SIMONS TRAVEL GRANT, 2018-2020

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 AND 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.

## Professional Memberships

AMERICAN MATHEMATICAL SOCIETY (AMS)

INTERNATIONAL ASSOCIATION OF MATHEMATICAL PHYSICS (IAMP)

SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS (SIAM)

## Languages

HUNGARIAN: Native

ENGLISH: Fluent

## Other skills

L<sup>A</sup>T<sub>E</sub>X: Pretty good

CODING IN C: Okayish

KRAV MAGA: Passed Level 2 Exam (CT 707)

HARMONICA: Beginner