# Ákos Nagy

CURRICULUM VITÆ

Last updated on February 16, 2018

## Personal Information


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|---|---|
| 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 |
| | 117 Physics Building |
| | 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

### Current

- William W. Elliott Assistant Research Professor, Duke University
  January 1, 2018 – present
  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 ]

## Invited talks

**Future**

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

**Past**

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, Hungarian Academy of Sciences, 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

LaTeX: Pretty good

CODING IN C: Okayish

KRAV MAGA: Passed Level 2 Exam (CT 707)

HARMONICA: Beginner