Nima Lashkari

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Date of Birth: Sep 20, 1985
Citizenship: Canada-Iran

Appointments

Jan 2015- Currently	**Massachusetts Institute of Technology** Postdoctoral Associate, Center for Theoretical Physics
Sep 2013- Aug 2014	**Stanford University** Visiting Scholar, Stanford Institute for Theoretical Physics
Jul 2012- Aug 2013 Sep 2014- Dec 2014	**University of British Columbia** Postdoctoral Fellow, Department of Physics and Astronomy

Education

2008-2012	**McGill University** Ph.D. in Physics
2006-2008	**McGill University** M.Sc. in Physics
2003-2006	**Sharif University of Technology** B.Sc. in Physics

Honors and Awards

Sep 2017	**It from Qubit: Simons Fellowship**
2015-2017	**Marie Sklodowska-Curie Fellowship** Declined European Commission, University of Amsterdam
2012-2014	**NSERC Postdoctoral Fellowship** Natural Sciences and Engineering Research Council of Canada (NSERC)
2011-2012	**Schulich Graduate Fellowship**
2010-2011	**Dow-Hickson Fellowship**
2009-2010	**Principal's Graduate Fellowship**
2008-2009	**Dow-Hickson Fellowship** McGill University
2002	**Honourable Mentioned in "The First Step to the Nobel Prize"** International Highschool Physics Competition

Publications

1. N. Lashkari, A. Dymarsky, and H. Liu, "Universality of Quantum Information in Chaotic CFTs," `arXiv:1710.10458 [hep-th]`

2. N. Lashkari, "Entanglement at a Scale and Renormalization Montonones," `arXiv:1704.05077 [hep-th]`

3. A. Dymarsky, N. Lashkari, and H. Liu, "Subsystem ETH," `arXiv:1611.08764 [cond-mat.stat-mech]`

4. N. Lashkari, A. Dymarsky, and H. Liu, "Eigenstate Thermalization Hypothesis in Conformal Field Theory," `arXiv:1610.00302 [hep-th]`

5. N. Lashkari, J. Lin, H. Ooguri, B. Stoica, and M. Van Raamsdonk, "Gravitational Positive Energy Theorems from Information Inequalities," *PTEP* **2016** no. 12, (2016) 12C109, `arXiv:1605.01075 [hep-th]`

6. N. Lashkari, "Modular Hamiltonian of Excited States in Conformal Field Theory," *Phys. Rev. Lett.* **117** no. 4, (2016) 041601, `arXiv:1508.03506 [hep-th]`

7. N. Lashkari and M. Van Raamsdonk, "Canonical Energy is Quantum Fisher Information," *JHEP* **04** (2016) 153, `arXiv:1508.00897 [hep-th]`

8. N. Lashkari, C. Rabideau, P. Sabella-Garnier, and M. Van Raamsdonk, "Inviolable energy conditions from entanglement inequalities," *JHEP* **06** (2015) 067, `arXiv:1412.3514 [hep-th]`

9. B. Czech, P. Hayden, N. Lashkari, and B. Swingle, "The Information Theoretic Interpretation of the Length of a Curve," *JHEP* **06** (2015) 157, `arXiv:1410.1540 [hep-th]`

10. N. Lashkari, "Relative Entropies in Conformal Field Theory," *Phys.Rev.Lett.* **113** (2014) 051602, `arXiv:1404.3216 [hep-th]`

11. N. Lashkari and J. Simon, "From state distinguishability to effective bulk locality," *JHEP* **1406** (2014) 038, `arXiv:1402.4829 [hep-th]`

12. N. Lashkari, M. B. McDermott, and M. Van Raamsdonk, "Gravitational dynamics from entanglement 'thermodynamics'," *JHEP* **1404** (2014) 195, `arXiv:1308.3716 [hep-th]`

13. C. Behan, K. Larjo, N. Lashkari, B. Swingle, and M. Van Raamsdonk, "Energy trapping from Hagedorn densities of states," *JHEP* **1310** (2013) 063, `arXiv:1304.7275 [hep-th]`

14. N. Lashkari, "Equilibration of Small and Large Subsystems in Field Theories and Matrix Models," *Comm. in Math. Phys. 333, 3, 1199* (2015) , `arXiv:1304.6416 [hep-th]`

15. N. Lashkari, D. Stanford, M. Hastings, T. Osborne, and P. Hayden, "Towards the Fast Scrambling Conjecture," *JHEP* **1304** (2013) 022, `arXiv:1111.6580 [hep-th]`

16. A. Castro, N. Lashkari, and A. Maloney, "Quantum Topologically Massive Gravity in de Sitter Space," *JHEP* **1108** (2011) 040, `arXiv:1105.4733 [hep-th]`

17. A. Castro, N. Lashkari, and A. Maloney, "A de Sitter Farey Tail," *Phys.Rev.* **D83** (2011) 124027, `arXiv:1103.4620 [hep-th]`

18. N. Lashkari, "Holographic Symmetry-Breaking Phases in AdS_3/CFT_2," *JHEP* **1111** (2011) 104, `arXiv:1011.3520 [hep-th]`

19. N. Lashkari and A. Maloney, "Topologically Massive Gravity and Ricci-Cotton Flow," *Class.Quant.Grav.* **28** (2011) 105007, `arXiv:1007.1661 [hep-th]`

20. N. Lashkari and R. H. Brandenberger, "Speed of Sound in String Gas Cosmology," *JHEP* **0809** (2008) 082, `arXiv:0806.4358 [hep-th]`

Recent Invited Talks

Oct 2017	Physics Department, Johns Hopkins University Physics Department, Princeton University Physics Department, University of Toronto
Aug 2017	Quantum Information in Quantum Gravity III, University of British Columbia
May 2017	Great Lakes Strings, University of Cincinnati
Mar 2017	Perimeter Institute for Theoretical Physics Physics Department, McGill University
Jan 2017	Berkeley Center for Theoretical Physics, University of Berkeley
Dec 2016	Simons Center for Geometry and Physics, Stony Brook University
Nov 2016	Stanford Institute for Theoretical Physics, Stanford University
Apr 2016	Physics Department, University of California Davis
Mar 2016	Center for Fundamental Laws of Nature, Harvard University Physics Department, University of Kentucky
Feb 2016	Kavli Institute for Theoretical Physics, Santa Barbara

Jan 2016	Physics Department, Brown University Physics Department, Yale University Institute of Physics, University of Amsterdam Lorentz Center, Leiden Institute of Physics
Nov 2015	Department of Mathematics, Harvard University Institute for Advanced Study, Princeton
Sep 2015	Centre de Recherche Mathematique, Montreal Center for Fundamental Laws of Nature, Harvard University Physics Department, Brandeis University
Aug 2015	Perimeter Institute for Theoretical Physics, Waterloo
May 2015	Stanford Institute for Theoretical Physics, Stanford University Institute for Quantum Information and Matter, Caltech
Feb 2015	Instituto de Fisica Teorica, University of Madrid
Jan 2015	Quantum Information Processing 2015, University of Technology Sydney
Apr 2014	Physics Department, McGill University
Mar 2014	Center for Physics, Aspen
Feb 2013	School of Mathematics, University of Edinburgh
Sep 2012	Department of Physics and Astronomy, University of British Coloumbia
Apr 2012	Kavli Institute for Theoretical Physics, Santa Barbara

Community Service

Reviewer	**Journal of High Energy Physics** **Communications in Mathematical Physics** **Classical and Quantum Gravity** **Journal of Statistical Mechanics: Theory and Experiment** **Gravitation and General Relativity** **Physics Letter B**
Grant Review Panelist	**Foundational Questions Institute**, **"2015 The Physics of What Happens"**

Languages

Fluent in **English**, **French** and **Farsi**

References

Patrick Hayden
Professor of Physics, Stanford University
Email: phayden@stanford.edu

Alexander Maloney
Associate Professor of Physics
McGill University
Email: maloney@physics.mcgill.ca

Mark Van Raamsdonk
Professor of Physics
University of British Columbia
Email: mav@phas.ubc.ca

Hong Liu
Professor of Physics, MIT
Email: hong_liu@mit.edu

Hirosi Ooguri
Fred Kavli Professor of Theoretical Physics
and Mathematics
California Institute of Technology
Email: ooguri@caltech.edu