# Emil Khabiboulline

17 Oxford St, Jefferson Lab; Cambridge, MA 02138; USA +1 (630) 457 8216 | ekhabiboulline@g.harvard.edu | ekhabiboulline.me

#### **EDUCATION**

## Harvard University

August 2016 - Present

Ph.D. Candidate, M.A. in Physics

Cambridge, MA

- · Committee: Mikhail Lukin (chair), Aram Harrow, Ashvin Vishwanath, Daniel Jafferis.
- · Funding: National Science Foundation Graduate Research Fellow.

## California Institute of Technology

September 2012 - June 2016

B.S. in Physics

Pasadena, CA

- · Funding: Stamps Scholar, Dunham Scholar, Fermi Research Alliance Scholar.
- · Honors: Frank Teruggi Memorial Award, Lucy Guernsey Service Award, SanPietro Travel Prize.

# Illinois Mathematics and Science Academy

August 2009 - June 2012

High School Diploma

Aurora, IL

· Honors: National Merit Finalist, National AP Scholar.

#### **PUBLICATIONS**

- · E. T. Khabiboulline, J. Borregaard, K. De Greve, and M. D. Lukin. Quantum-assisted telescope arrays. *Phys. Rev. A*, 100:022316, Aug 2019.
- · E. T. Khabiboulline, J. Borregaard, K. De Greve, and M. D. Lukin. Optical interferometry with quantum networks. *Phys. Rev. Lett.*, 123:070504, Aug 2019.
- · S. Peng, R. Zhang, V. H. Chen, E. T. Khabiboulline, P. Braun, and H. A. Atwater. Three-dimensional single gyroid photonic crystals with a mid-infrared bandgap. *ACS Photonics*, 3(6):1131–1137, 2016.
- · E. T. Khabiboulline, C. L. Steinhardt, J. D. Silverman, S. L. Ellison, J. T. Mendel, and D. R. Patton. Changing ionization conditions in SDSS galaxies with active galactic nuclei as a function of environment from pairs to clusters. *The Astrophysical Journal*, 795(1):62, 2014.
- · E. J. DiMarco, E. Khabiboulline, D. F. Orris, M. A. Tartaglia, and I. Terechkine. Superconducting solenoid lens for a high energy part of a proton linac front end. *IEEE Transactions on Applied Superconductivity*, 23(3):4100905, June 2013.

### Presentations

- · Talk (Invited): Quantum Computing Seminar (January 13, 2020) at Brookhaven National Laboratory.
- · Talk: American Physical Society March Meeting 2019 Focus Session on Distributed Quantum Computation, Networking, and Information Security.
- · Poster: Quantum Information Processing 2019.
- · Talk (Invited): Lunch Seminar (November 8, 2018) at Institute for Theoretical Atomic, Molecular, and Optical Physics (Harvard).
- · Talk: Workshop on Quantum Information (April 23-24, 2018) at Center of Mathematical Sciences and Applications (Harvard).
- · Talk: American Physical Society March Meeting 2016.

- · Poster: International Conference on Quantum, Atomic, Molecular, and Plasma Physics 2015.
- · Poster (Chambliss Astronomy Achievement Student Award): 223rd Meeting of the American Astronomical Society.
- · Poster (Special Award from CERN): Intel International Science and Engineering Fair 2011.

# SERVICE

 $\cdot$  Referee: Quantum Computing Theory in Practice 2020.