Polnop (Po) Samutpraphoot

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Education

2014-21 **Harvard University,** Ph.D. and A.M., Physics.
Thesis: *A quantum network node based on a nanophotonic interface for atoms in optical tweezers.* Advisor: Mikhail D. Lukin

2010-14 **Massachusetts Institute of Technology,** S.B., Physics.
Thesis: *Anomalous Hall effect and persistent valley currents in graphene pn junctions*. Advisor: Leonid Levitov

Employment

2021- **University of California, Berkeley**. Postdoctoral Scholar in the EECS department.

Teaching Experience

2019 **Harvard University, Department of Physics**
Teaching Fellow in Modern Atomic and Optical Physics I (Physics 285a).

2014 **Massachusetts Institute of Technology, Department of Physics**
Teaching Assistant in Experimental Physics I (8.13, also known as Junior Lab).

Publications

1. T. Đorđević†, **P. Samutpraphoot†**, P. L. Ocola†, H. Bernien, B. Grinkemeyer, I. Dimitrova, V. Vuletić, M. D. Lukin. *Entanglement transport and a nanophotonic interface for atoms in optical tweezers,* SScience 373, 1511 (2021).

2. **P. Samutpraphoot†**, T. Đorđević†, P. L. Ocola†, H. Bernien, C. Senko, V. Vuletić, M. D. Lukin. *Strong coupling of two individually controlled atoms via a nanophotonic cavity,* Physical review letters 124, 063602 (2020)

3. Y. D. Lensky, J. C. W. Song, **P. Samutpraphoot**, L. S. Levitov. *Topological Valley Currents in Gapped Dirac Materials*, Physical review letters 114 (25), 256601 (2015)

4. J. C. W. Song, **P. Samutpraphoot**, and L. S. Levitov. *Topological Bands in G/h-BN Heterostructures*, Proceedings of the National Academy of Sciences 112 (35), 10879- 10883 (2015)

5. **P. Samutpraphoot**, S. Weber, Q. Lin, D. Gangloff, A. Bylinskii, B. Braverman, A. Kawasaki, C. Raab, W. Kaenders, and V. Vuletić. *Passive intrinsic-linewidth narrowing of ultraviolet extended-cavity diode laser by weak optical feedback*. Optics Express 22, 11592-15999 (2014)

Conference Presentations and Invited Talks

03/2021	*A quantum network node based on a nanophotonic interface for atoms in optical tweezers*, Harvard-MIT Center for Ultracold Atoms (virtual talk)
01/2021	*A Nanoscale Interface between Atoms and Photons,* Princeton University (virtual talk)
01/2021	*A Nanoscale Interface between Atoms and Photons,* UC Berkeley (virtual talk)
12/2020	*A Nanoscale Interface between Atoms and Photons,* Max-Planck Institute for Quantum Optics (virtual talk)
12/2020	*A Nanoscale Interface between Atoms and Photons,* Stanford University (virtual talk)
05/2019	*A Nanoscale Interface between Atoms and Photons,* APS DAMOP meeting (virtual poster)
07/2017	*A Nanoscale Interface for Atoms and Photons,* Princeton University, Princeton, NJ
01/2017	*Nanophotonic Cavity QED with Cold Atoms,* Thai-Singapore Scholars Workshop on Topics in Quantum Technology, Bangkok, Thailand
07/2016	*Nanophotonic Cavity QED with Trapped Neutral Atoms,* ICAP, Seoul, Korea (poster)
01/2016	*Nanophotonic Cavity QED with Neutral Atoms,* CQT, Singapore.
06/2015	*Atom Entanglement in Nanophotonic Cavity QED,* APS DAMOP meeting, Columbus, OH (poster)
03/2014	*Anomalous Topological Currents in Graphene Superlattices,* *APS* March meeting, Denver, CO (poster)
06/2013	*Narrowing external cavity diode laser with optical feedback,* EECScon, MIT, Cambridge, MA

Honors and Awards

2019	Bok Center Certificate for Distinction in Teaching, Harvard University
2014	Purcell Fellowship, Harvard University
2014	Phi Beta Kappa society, Massachusetts Institute of Technology
2014	Sigma Pi Sigma honor society, Massachusetts Institute of Technology
2008	Gold medal, International Physics Olympiad

References

Prof. Mikhail D. Lukin
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Relation: PhD advisor

Prof. Vladan Vuletic
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of Technology
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Relation: second PhD advisor

Prof. Hannes Bernien
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