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Stimulated raman adiabatic passage in optomechanics

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Citation

Fedoseev, V. (2022, July 7). *Stimulated raman adiabatic passage in optomechanics. Casimir PhD Series*. Retrieved from <https://hdl.handle.net/1887/3421649>

Version: Publisher's Version

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Downloaded from: <https://hdl.handle.net/1887/3421649>

Note: To cite this publication please use the final published version (if applicable).

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Curriculum Vitae

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Silver medal at the 34th International Physics Olympiad, Taiwan.

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Bachelor of Science in Applied Physics and Mathematics, Moscow Institute of Physics and Technology, Russia.

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Master of Economics, International College of Economics and Finance, Russia.

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High frequency trading in a Russian proprietary trading firm.

2013 - 2014

Visitor at Institute of Solid State Physics, Russia.

2014 - 2015

Master of Philosophy in Physics, Quantum Matter group, University of Cambridge, the UK.

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List of publications

1. **V. Fedoseev**, M. Fisicaro, H. van der Meer, W. Löffler and D. Bouwmeester, *Realignment-free cryogenic macroscopic optical cavity coupled to an optical fiber*, Rev. Sci. Instrum. 93, 013103 (2022)
(Chapter 5 of this thesis)
2. **V. Fedoseev**, F. Luna, I. Hedgepeth, W. Löffler and D. Bouwmeester, *Stimulated Raman Adiabatic Passage in Optomechanics*, Phys. Rev. Lett. 126, 113601 (2021)
(Chapters 3 and 4 of this thesis)
3. D. C. Newsom, F. Luna, **V. Fedoseev**, W. Löffler and D. Bouwmeester, *Optimal optomechanical coupling strength in multimembrane systems*, Phys. Rev. A 101, 033829 (2020)
4. S. Sonar, **V. Fedoseev**, M. J. Weaver, F. Luna, E. Vlieg, H. van der Meer, D. Bouwmeester and W. Löffler, *Strong thermomechanical squeezing in a far-detuned membrane-in-the-middle system*, Phys. Rev. A 98, 013804 (2018)
(Chapters 2 of this thesis)
5. I. Battisti, **V. Fedoseev**, K. M. Bastiaans, A. de la Torre, R. S. Perry, F. Baumberger, and M. P. Allan, *Poor electronic screening in lightly doped Mott insulators observed with scanning tunneling microscopy*, Phys. Rev. B 95, 235141 (2017)
6. I. Battisti, K. M. Bastiaans, **V. Fedoseev**, A. de la Torre, N. Iliopoulos, A. Tamai, E. C. Hunter, R. S. Perry, J. Zaanen, F. Baumberger and M. P. Allan, *Universality of pseudogap and emergent order in lightly doped Mott insulators*, Nature Physics 13, 21–25 (2017)
7. V. Dremov, **V. Fedoseev**, P. Fedorov and A. Grebenko, *Fast and reliable method of conductive carbon nanotube-probe fabrication for scanning probe microscopy*, Rev. Sci. Instrum. 86, 053703 (2015)

Acknowledgements

During my PhD studies I learnt so much about optics, mechanics, electronics. Now I perceive myself as a researcher. For sure, that would not be possible without the effort of many people who supported me these years.

I am particularly grateful to my promotor Dirk Bouwmeester for guiding me. Thank you for your patience and letting me accomplish risky ideas.

I would like to thank Wolfgang Löffler for teaching me optics in the lab, day to day supervision and tackling all kinds of technical problems.

Many experiments would not be possible without technical expertise of Harmen van der Meer from Fine Mechanics Department. I was often amazed how Harmen was able to find practical solutions for our crazy projects.

I would like to thank Kier Heeck, Raymond Koehler and Harry Visser for support in electronics. I thank our secretary Henriette van Leeuwen.

I thank Frank Buters, Fernando Luna and Matthew Weaver for introducing me to the optical lab and the setups. I am grateful to Ian Hedgepeth for fruitful discussions. I thank Xinrui Wei and Leon Raabe who worked with me in the lab as well as Sameer Sonar, Matteo Fisicaro, Tim Fuchs, Remi Claessen, Bas ten Haaf, Owen Huisman.

Finally, I am indebted to my wife Nastya for supporting me and my son Yakov for inspiration.