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Probing quantum puddles: nonlinear dynamics in superfluid film optomechanics

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Citation

Raabe, L. D. (2026, September 8). *Probing quantum puddles: nonlinear dynamics in superfluid film optomechanics*. Retrieved from <https://hdl.handle.net/1887/4309261>

Version: Publisher's Version

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

Curriculum Vitae

I was born on November 2nd, 1994 in Wiesbaden, Germany and grew up there. After completing my German high school diploma at Gutenbergsschule Wiesbaden in 2014, I started studying physics at ETH Zürich in Switzerland. I obtained my BSc degree in physics in 2018 and finished my MSc in physics in 2021 with my MSc thesis titled *Fast and random measurement basis choice for a loop-hole-free Bell test on superconducting qubits* in the group of Andreas Wallraff.

In March 2021, I started my PhD under the supervision of Dirk Bouwmeester. During the work presented in this thesis, I developed an experimental platform to optomechanically probe and control the motion of a thin film of superfluid Helium condensed on an optical ring resonator. I (co-)supervised four students during their research project in our lab and served as teaching assistant for a practical laboratory courses. I attended conferences in Veldhoven, The Netherlands and the summer school *The new mechanics* in 2022 in Les Houches, France. I also gained experience in international collaborations through the work with my colleagues at UCSB.

Acknowledgements

I feel very lucky to have met and worked with many incredibly kind and talented people over the last 5 years. Bringing my PhD to a satisfying close would not have been possible without them. First of all, I would like to thank my supervisor **Dirk** for the opportunity to work on my PhD and his support, from near and far, throughout many challenges over the years. I have learned a tremendous amount both in terms of physics and life in general during my PhD. I am also very grateful to my second supervisor **Tjerk**, who introduced me to many interesting and helpful people and helped me find my footing in the beginning of my PhD journey.

I would like to thank my colleague **Xinrui**, who made days spent in a dark optical lab much more enjoyable, as well as my colleague **Hidde** who helped a tremendous amount in understanding our measurements and **Kellan** who provided the optical ring resonators and a lot of knowledge on how to use them. I also want to thank my colleagues **Ian**, **Vitaly** and **Enrique**. I enjoyed the (co-)supervision of the students that joined our lab **Remi**, **Owen**, **Felix** and especially **Geert**, who contributed a significant amount to our early attempts to keep optical coupling at low temperatures. Our experiments would not have been possible without the help and work of the ELD and the FMD, especially from **Harmen**, **Robin**, **Hugo**, **Kees**, **Raymond** and **Peter**. I also want to thank **Arlette** and her team for their help with the design of the superfluid capillary setup and quick support in repairing our dilution fridge.

Thank you for always having an open ear and for interesting discussions **Martin**, **Kier**, **Wolfgang**, **Michiel** and **Bas**. Thank you for help in many small things and an always enjoyable time to my fellow PhD students **Kirsten K.**, **Petr**, **Matteo**, **Jacopo**, **Koen**, **Dennis**, **Loek**, **Tim**, **Martijn**, **Richard**, **Norman** and **Kirsten M.** among many others.

My friends have made my time in Leiden all the more worthwhile. Thank you **Ali** and **Sanam**, **Ann**, **Silvana** and **Nick**, and **Julio** for all the great board game nights. I also want to thank my colleague and friend **Jaimy** for his help with repairing the dilution fridge as well as the bouldering sessions that made for very enjoyable Tuesday and Thursday evenings.

I would like to thank my parents-in-law **Oli** and **Francoise** for their regular visits and support in the last years.

I want to thank my sister **Lou** for our shared bond and regularly checking up on me. I will always remember my father **Christoph** as an incredibly kind and cheerful person, who I look up to. Without the encouragement, trust and support of my mother **Susanne**, I would not be who I am today and I am very grateful for that.

My son **Éloan** has enriched my life in the past 2 years in incredible ways and I am very thankful to share this time with him.

Lastly, none of the challenges, achievements, and memories of the past years would have been possible without my smart, beautiful, and brave wife **Soleenn**. Thank you for being there in good and bad times.