Universiteit Leiden
The Netherlands

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
License:	Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden
Downloaded from:	https://hdl.handle.net/1887/4309261

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

Probing quantum puddles: Nonlinear dynamics in superfluid film optomechanics

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr. S. de Rijcke,
volgens besluit van het college voor promoties
te verdedigen op dinsdag 8 september 2026
klokke 13:00 uur

door

Leon David Raabe

geboren te Wiesbaden, Duitsland

in 1994

Promotores:	Prof. dr. D. Bouwmeester	
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An electronic version of this thesis can be found at
https://scholarlypublications.universiteitleiden.nl

Printing: Ridderprint | www.ridderprint.nl

The research described in this thesis was conducted at the Leiden Institute of Physics, Leiden University and was funded by the Dutch Research Council (NWO).

The cover shows a sketch of an optical ring resonator covered with a thin film of superfluid helium as described in the thesis. Two stylized photons with rubber boots create splashes and excite a mechanical mode in the superfluid film. The rain in the background is a nod to the Dutch weather that quickly changes between rain and sunshine.

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