



**UvA-DARE (Digital Academic Repository)**

**One-dimensional Bose gas on an atom chip**

van Amerongen, A.H.

[Link to publication](#)

*Citation for published version (APA):*

van Amerongen, A. H. (2008). One-dimensional Bose gas on an atom chip Amsterdam

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

One-dimensional Bose gas  
on an atom chip



# One-dimensional Bose gas on an atom chip

## ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Universiteit van Amsterdam  
op gezag van de Rector Magnificus  
prof. dr. D.C. van den Boom  
ten overstaan van een door het college voor promoties ingestelde  
commissie, in het openbaar te verdedigen in de Agnietenkapel  
op vrijdag 30 mei 2008, te 14:00 uur

door

Aaldert Hidde van Amerongen

geboren te Amsterdam

Promotiecommissie:

Promotor: prof. dr. J.T.M. Walraven  
Copromotor: dr. N.J. van Druten

Overige leden: prof. dr. A. Aspect  
prof. dr. M.S. Golden  
prof. dr. H.B. van Linden van den Heuvell  
prof. dr. K.J. Schoutens  
prof. dr. G.V. Shlyapnikov  
dr. R.J.C. Spreeuw  
prof. dr. P. van der Straten

Faculteit der Natuurwetenschappen, Wiskunde en Informatica

ISBN: 978-90-9022841-9

The work described in this thesis was carried out in the group “Quantum Gases & Quantum Information”, at the Van der Waals-Zeeman Instituut of the University of Amsterdam, Valckenierstraat 65, 1018 XE Amsterdam, The Netherlands, where a limited number of copies of this thesis is available.

A digital version of this thesis can be downloaded from <http://www.science.uva.nl/research/aplp>

Funding was also provided by NWO (VIDI grant N.J. van Druten), FOM (Projectruimte and program ‘Quantum Gases’) and the EU (Marie Curie Research and Training Network ‘Atom Chips’).