

Jook Walraven - Curriculum Vitea



GIVEN NAMES: JOANNES THEODORUS MARIA
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NATIONALITY: NETHERLANDS
DATE OF BIRTH: 20/08/1947
PLACE OF BIRTH: AMSTERDAM

Emeritus Professor of physics at the University of Amsterdam

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Employment history

2012- Emeritus Professor of Physics
2004-2012 Professor of Physics at the Van der Waals-Zeeman Institute of the University of Amsterdam
2002-2003 Group Leader Quantum Gases at the FOM-Institute for Atomic and Molecular Physics (AMOLF)
1996-2002 Director FOM-Institute for Atomic and Molecular Physics (AMOLF)
1988-1996 Professor of Physics at the Van der Waals-Zeeman Institute of the University of Amsterdam
1979-1988 Universitair (hoofd) docent at the Natuurkundig Laboratorium of the University of Amsterdam
1973-1979 PhD-student of the Stichting FOM

Education

University of Amsterdam, Thesis 1982 (cum laude), *Stabilization of Atomic Hydrogen and Deuterium* (promotor: prof. dr. I.F. Silvera).

Honors

- 2015 Fellow of IQOQI/Austrian Academy of Sciences
- 2014 Visiting professor at the Center of Quantum Technologies – NUS Singapore
- 2013 Visiting professor at IQOQI/Austrian Academy of Sciences/University of Innsbruck
- 2013 Visiting professor at IQOQI/Austrian Academy of Sciences/University of Vienna
- 2005 Fellow of the American Physical Society
- 2000 NWO-Huygens lecture (chaperon-lecturer of Carl Wieman)
- 1998 Member of the Hollandse Maatschappij de Wetenschappen, Haarlem
- 1995 Visiting professor at the Ecole Normale Supérieure, Paris, France
- 1992 Visiting scientist at Kyoto University, Japan
- 1990 NWO – PIONIER
- 1984 Visiting professor Université de Grenoble, France
- 1977 Shell travel award

Administrative positions

- 2012 - 2014: Member Administrative Council Paris Science et Lettres - Research School
- 2012: member AERES visiting committee Laboratoire Kastler-Brossel (ENS-Paris)
- 2012 - 2014: Member Administrative Council Paris Science et Lettres - Research School
- 2011: member Physics review panel of the Academy of Finland
- 2010: member DFG Review panel FOR801 "Strong Correlations in Multiflavor Quantum Gases"
- 2009: member AERES Committee Laboratoire Collisions Agrégats Réactivité (LCAR-Toulouse)
- 2009: chairman ANR Visiting Committee Laboratoire Kastler-Brossel (ENS-Paris)
- 2008: member Visiting Committee of the Physics Department of ENS-Paris)
- 2006 - 2010: Member Editorial Board Advances in Atomic, Molecular and Optical Physics
- 2006 - 2011: Member advisory board Inst. Franc. de Recherche Atomes Froids (IFRAF)
- 2006 - 2010: Member Advisory committee ESF program on Cold atoms (Euroquam)
- 2003 - 2005: Member Advisory committee DFG Schwerpunkt Program on Cold atoms
- 2001 - 2011: Member Fachbeirat Max Planck Institute for Quantum Optics (Garching)
- 2001 - 2004: FOM WGM-committee Atomic Physics, Chairman
- 2000 - 2004: Member Visiting Committee Laboratoire Kastler-Brossel (ENS-Paris)
- 1996 - 2003: member Editorial Board Journal of Low Temperature Physics
- 1996 - 2002: FOM-Institute for Atomic and Molecular Physics, Director
- 1995 - 1996: Van der Waals - Zeeman Institute - Chairman
- 1995 - 1996: Member IUPAP C3 committee (statistical physics)
- 1990 - 1996: Member IUPAP C5 committee (low temperature)
- 1991 - 1996: Vakgroep Experimentele Fysica - Chairman
- 1991 - 1996: Member board of the Foundation for Fundamental Research of Matter (FOM)
- 1991 - 1995: FOM WGM Statistical physics, Chairman
- 1989 - 1991: FOM WGM Statistical Physics, Secretary

PhD-Theses supervised or co-supervised

- 2012 P. Cleary, *Manipulation of ultracold Bose gases in a time-averaged potential*
- 2012 P. Wicke, *Experiments on two-component quantum gases on an atom chip*
- 2012 A. Ludewig, *Feshbach Resonances in ^{40}K*
- 2009 T.G. Tiecke, *Feshbach resonances in ultracold mixtures of the fermionic quantum gases ^6Li and ^{40}K*
- 2008 A. van Amerongen (co-promotor: Dr. N.J. van Druten), *One-dimensional Bose gas on an atom chip*
- 2005 Ch. Buggle, *Collective and Collisional Properties of the Rubidium Quantum Gas*
- 2003 I. Shvarchuck, *Bose-Einstein Condensation into Non-Equilibrium States*
- 2003 D.S. Petrov (co-promotor: prof.dr. G.V. Shlyapnikov) *Bose-Einstein Condensation in Low-Dimensional Trapped Gases*
- 2001 K. Dieckmann, *Bose-Einstein Condensation with High Atom Number in a Deep Magnetic Trap*
- 1999 A.P. Mosk (co-promotor: dr. M. Reynolds), *Optical Study of Two-Dimensional Atomic Hydrogen Gas*
- 1999 P. Fedichev (co-promotor: prof.dr. G.V. Shlyapnikov), *Kinetics and Dynamics Of Trapped Bose-condensed Gases*
- 1999 R. de Bruin (co-promotor: dr. A. Michels), *Heat Transfer in a Critical Fluid under Microgravity Conditions - a Spacelab Experiment*
- 1998 M. de Langen (co-promotor: dr. K.O. Prins), *Chain Dynamics in the Orthorhombic and Hexagonal Phases of Polyethylene*
- 1997 P. Pinkse (co-promotor: dr. T.W. Hijmans), *Evaporatively-Cooled Atomic Hydrogen Investigated by One- and Two-Photon Optical Methods*
- 1995 I.D. Setija (co-promotor: dr. T.W. Hijmans), *Optical cooling of magnetically trapped atomic hydrogen*
- 1994 J.J. Berkhout, *Atomic hydrogen and the surface of liquid helium*
- 1993 O.J. Luiten (co-promotor: dr. T.W. Hijmans), *Lyman-alpha spectroscopy of magnetically trapped atomic hydrogen*
- 1993 K. Visscher (co-promotor: dr. G.J. Brakenhoff), *Optical micromanipulation and confocal microscopy*
- 1992 A.S. Kulik (co-promotor: dr. K.O. Prins), *High pressure NMR on Polymers*
- 1991 W.L. Vos (co-promotor: dr. J.A. Schouten), *Phase equilibria in simple systems at high pressure*
- 1989 R. van Roijen, *Atomic hydrogen in a magnetic trap*
- 1988 J.M.V.A. Koelman (Technische Universiteit Eindhoven, 1e promotor: prof.dr. B.J. Verhaar), *New directions in the theory of spin-polarized atomic hydrogen and deuterium*
- 1988 L.P.H. de Goey (Technische Universiteit Eindhoven, 1e promotor: prof.dr. B.J. Verhaar), *Collision phenomena in a quantum gas*
- 1987 A.P.M. Mattheij (promotor: prof. dr. I.F. Silvera), *Spin-polarized atomic hydrogen*
- 1986 R. Sprik (promotor: prof. dr. I.F. Silvera), *Experiments on Spin-Polarized Atomic Hydrogen at High Density*

Scientific meetings: Organized 7 major international scientific meetings

Publications

1. *Decoherence of Impurities in a Fermi Sea of Ultracold Atoms*
Marko Cetina, Michael Jag, Rianne S. Lous, Jook T. M. Walraven, Rudolf Grimm, Rasmus S. Christensen, and Georg M. Bruun,
[Physical Review Letters 115 \(2015\) 135302](#)
2. *Controlling integrability in a quasi-one-dimensional atom-dimer mixture*
D.S. Petrov, V. Lebedev, and J.T.M. Walraven,
[Phys. Rev. A 85 \(2012\) 062711](#)
3. *Manipulation of a Bose-Einstein condensate by a time-averaged orbiting potential using phase jumps of the rotating field*
P.W. Cleary, T.W. Hijmans, and J.T.M. Walraven,
[Phys. Rev. A 82 \(2010\) 063635](#)
4. *Asymptotic-bound-state model for Feshbach resonances*
T.G. Tiecke, M. Goosen, J.T.M. Walraven, and S.J.J.M.F. Kokkelmans,
[Physical Review A 82 \(2010\) 042712](#)
5. *Broad Feshbach resonance in the ${}^6\text{Li}$ - ${}^{40}\text{K}$ mixture*
T.G. Tiecke, M. Goosen, A. Ludewig, S.D. Gensemer, S. Kraft, S.J.J.M.F. Kokkelmans, and J.T.M. Walraven,
[Physical Review Letters 104 \(2010\) 053202](#)
6. *Atom-dimer scattering and long-lived trimers in fermionic mixtures*
J. Levinsen, T. G. Tiecke, J. T. M. Walraven, and D. S. Petrov,
[Physical Review Letters 103 \(2009\) 153202 1-43](#)
7. *A high-flux 2D MOT source for cold lithium atoms*
T.G. Tiecke, S.D. Gensemer, A. Ludewig, and J.T.M. Walraven,
[Physical Review A 80 \(2009\) 013409](#)
8. *Exploring an Ultracold Fermi-Fermi Mixture: Interspecies Feshbach Resonances and Scattering Properties of ${}^6\text{Li}$ and ${}^{40}\text{K}$*
E. Wille, F. M. Spiegelhalter, G. Kerner, D. Naik, A. Trenkwalder, G. Hendl, F. Schreck, R. Grimm, T. G. Tiecke, J. T. M. Walraven, S. J. J. M. F. Kokkelmans, E. Tiesinga, and P. S. Julienne,
[Physical Review Letters 100 \(2008\) 053201 1-4](#)
9. *Bose-Einstein condensates studied with a linear accelerator*
Ch. Buggle, J. Leonard, W. von Klitzing and J.T.M. Walraven,
in: Laser Spectroscopy, E.A. Hinds, A. Ferguson and E. Riis (Eds.), World Scientific, Singapore 2005, pp. 199-206.
10. *Shape oscillations in non-degenerate Bose gases - transition from the collisionless to the hydrodynamic regime*
Ch. Buggle, P. Pedri, W. von Klitzing and J.T.M. Walraven,
[Physical Review A 72 \(2005\) 043610 1-10](#)
11. *Interferometric determination of the s- and d-wave scattering amplitudes in ${}^{87}\text{Rb}$*
Ch. Buggle, J. Leonard, W. von Klitzing and J.T.M. Walraven,
[Physical Review Letters 93 \(2004\) 173202](#)
12. *Hydrodynamic clouds and Bose-Einstein condensation*
Ch. Buggle, I. Schvachuck, W. von Klitzing and J.T.M. Walraven,
[J. Phys. IV France 116 \(2004\) 211-217](#)
13. *Bose-Einstein condensation in a magnetic double-well potential,*
T.G. Tiecke, M. Kemmann, Ch. Buggle, I. Schvachuck, W. von Klitzing and J.T.M. Walraven
Journal of optics B 5 (2003) S119-S123
14. *Hydrodynamic behavior in expanding thermal clouds of ${}^{87}\text{Rb}$*
I. Shvachuck, Ch. Buggle, D.S. Petrov, M. Kemmann, W. Von Klitzing, G.V. Shlyapnikov and J.T.M. Walraven
[Physical Review A 68 \(2003\) 063603 1-7](#)

15. *Focusing of Bose-Einstein condensates in free flight*
I. Shvarchuck, Ch. Buggle, D.S. Petrov, M. Kemmann, T.G. Tiecke, W. Von Klitzing, G.V. Shlyapnikov and J.T.M. Walraven
In: [Interactions in ultracold gases](#): from atoms to molecules. - Weinheim: Wiley, 2003. - pp 415-420
16. *Bose-Einstein condensation into non-equilibrium states studied by condensate focusing*
I. Shvarchuck, Ch. Buggle, D.S. Petrov, K. Dieckmann, M. Zielonkowski, M. Kemmann, T. Tiecke, W. von Klitzing,
G.V. Shlyapnikov, and J.T.M. Walraven
[Physical Review Letters 89 \(2002\) 270404](#)
17. *Phase-fluctuating 3D Bose-Einstein condensates in elongated traps*
D.S. Petrov, G.V. Shlyapnikov and J.T.M. Walraven
[Physical Review Letters 87 \(2001\) 50404](#)
18. *New levels of control at low temperature*
J.T.M. Walraven
In: [NWO/Huygenslezing 2000](#). - Den Haag : Nederlandse Organisatie voor Wetenschappelijk Onderzoek, (2000) - P. 25-33
19. *Resonance-enhanced two-photon spectroscopy of magnetically trapped atomic hydrogen*
T.W. Hijmans, P.W.H. Pinkse, A.P. Mosk, M. Weidemüller, M.W. Reynolds, J.T.M. Walraven and C. Zimmermann
[Hyperfine Interactions 127 \(2000\)175-180](#)
20. *Regimes of quantum degeneracy in trapped 1D gases*
D.S. Petrov, G.V. Shlyapnikov and J.T.M. Walraven
[Physical Review Letters 85 \(2000\) 3745](#)
21. *Broad-area diode laser system for a rubidium Bose-Einstein condensation experiment*
I. Shvarchuck, K. Dieckmann, M. Zielonkowski, J.T.M. Walraven.
[Appl. Phys. B 71 \(2000\) 475](#)
22. *Photoassociation of Spin-polarized hydrogen,*
A.P. Mosk, M.W. Reynolds, T.W. Hijmans and J.T.M. Walraven,
[Physical Review Letters 82 \(1999\) 307-310](#)
23. *Two-dimensional magneto-optical trap as a source of slow atoms,*
Kai Dieckmann, R.C. Spreeuw, M. Weidemüller, and J.T.M. Walraven,
[Phys. Rev. A 58 \(1998\) 3891](#)
24. *One-dimensional evaporative cooling of magnetically trapped atomic hydrogen,*
P.W.H. Pinkse, A. Mosk, M. Weidemüller, M.W. Reynolds, T.W. Hijmans and J.T.M. Walraven,
[Phys. Rev. A 57 \(1998\) 4747-4760](#)
25. *Optical excitation of atomic hydrogen bound to the surface of liquid helium,*
A.P. Mosk, M.W. Reynolds, T.W. Hijmans and J.T.M. Walraven,
[Phys. Rev. Lett. 81 \(1998\) 4440-4443](#)
26. *Damping of low-energy excitations of a trapped Bose condensate at finite temperatures,*
P.O. Fedichev, G.V. Shlyapnikov, and J.T.M. Walraven,
[Phys. Rev. Lett. 80 \(1998\) 2269](#)
27. *Apparatus for optical study of atomic hydrogen on the surface of liquid helium*
A.P. Mosk, P.W.H. Pinkse, M.W. Reynolds, T.W. Hijmans, and J.T.M. Walraven
[J. Low Temp. Phys. 110 \(1998\) 199](#)
28. *Resonance enhanced two-photon spectroscopy of magnetically trapped atomic hydrogen*
P.W.H. Pinkse, A. Mosk, M. Weidemüller, M.W. Reynolds, T.W. Hijmans, J.T.M. Walraven, and C. Zimmermann,
[Phys. Rev. Lett., 79 \(1997\) 2423](#)
29. *Adiabatically changing the phase-space density of a trapped Bose gas,*
P.W.H. Pinkse, A. Mosk, M. Weidemüller, M.W. Reynolds, T.W. Hijmans, and J.T.M. Walraven
[Phys. Rev. Lett. 78 \(1997\) 990 \(PDF\)](#)
30. *Influence of a nearly resonant light on the scattering length in ultra-cold gases,*
P.O. Fedichev, Yu. Kagan, G.V. Shlyapnikov, and J.T.M. Walraven,
[Phys. Rev. Lett. 77 \(1996\) 2913](#)
31. *BEC in trapped atomic gases,*
Yu. Kagan, G.V. Shlyapnikov and J.T.M. Walraven,
[Phys. Rev. Lett. 76 \(1996\) 2670-2673](#)

32. *Collisional motion and evaporative cooling of atoms in magnetic traps*,
E.L. Surkov, J.T.M. Walraven, and G.V. Shlyapnikov,
[Phys. Rev. A 53 \(1996\) 3403](#)
33. *Kinetic theory of evaporative cooling of a trapped gas*,
O. J. Luiten, M. W. Reynolds, and J. T. M. Walraven,
[Phys. Rev. A 53 \(1996\) 381](#)
34. *Atomic Hydrogen in magnetostatic traps*,
J. T. M. Walraven,
in: [Quantum Dynamics of Simple Systems](#), G.-L. Oppo, S.M. Barnett, E. Riis, and M. Wilkinson
(Eds.), IOP, Bristol, 1996
35. *BEC and the relaxation explosion in magnetically trapped atomic hydrogen*
T.W. Hijmans, Yu. Kagan, G.V. Shlyapnikov, and J.T.M. Walraven
in: [Bose-Einstein Condensation](#), A.Griffin, D.W. Snoke, and S. Stringari (Eds.), Cambridge
(1995) 472-477.
36. *Decay kinetics and Bose condensation in a gas of spin-polarized triplet He (23S)*,
G.V. Shlyapnikov, J.T.M. Walraven, U.M. Rachmanov en M.W. Reynolds,
[Phys. Rev. Lett. 73 \(1994\) 3247-3250](#)
37. *Collisionless motion of neutral particles in magnetostatic traps*,
E.L. Surkov, J.T.M. Walraven, and G.V. Shlyapnikov,
[Phys. Rev. A 49 \(1994\) 4778](#).
38. *VUV spectroscopy of magnetically trapped atomic hydrogen*,
O.J. Luiten, H.G.C. Werij, M.W. Reynolds, I.D. Setija, T.W. Hijmans, and J.T.M. Walraven,
[Appl. Phys. B 59 \(1994\) 311-319](#)
39. *Optical cooling of atomic hydrogen in a magnetic trap*,
I.D. Setija, H.G.C. Werij, O.J. Luiten, M.W. Reynolds and J.T.M. Walraven,
[Phys. Rev. Lett. 70 \(1993\) 2257 - 2260](#)
40. *Lyman-alpha Spectroscopy of Magnetically Trapped Atomic Hydrogen*,
O.J. Luiten, H.G.C. Werij, I.D. Setija, M.W. Reynolds, T.W. Hijmans en J.T.M. Walraven,
[Phys. Rev. Lett. 70 \(1993\) 544 -547](#)
41. *Bose condensation and relaxation explosion in magnetically trapped hydrogen*,
T. W. Hijmans, Yu. Kagan, G. V. Shlyapnikov, and J. T. M. Walraven,
[Phys. Rev. B 48 \(1993\) 12886](#)
42. *Trapping and cooling of (anti)hydrogen*,
J.T.M. Walraven,
[Hyperfine Interactions 76 \(1993\) 205-220](#)
43. *Antihydrogen at sub-Kelvin temperatures*,
G.V. Shlyapnikov, J.T.M. Walraven and E.L. Surkov,
[Hyperfine Interactions 76 \(1993\) 31-46](#)
44. *Bose Condensation and Relaxation Explosion in Magnetically Trapped Atomic Hydrogen*,
T.W. Hijmans, Yu. Kagan, G.V. Shlyapnikov en J.T.M. Walraven,
[Phys. Rev. B 48 \(1993\) 12886-12892](#)
45. *Scattering of hydrogen atoms from liquid-helium surfaces*,
J.J. Berkhout, and J.T.M. Walraven,
[Phys. Rev. B 47 \(1993\) 8886-8904](#)
46. *Influence of the substrate on the low-temperature limit of the sticking probability of hydrogen atoms on He films*,
T.W. Hijmans, J.T.M. Walraven en G.V. Shlyapnikov,
[Phys. Rev. B 45 \(1992\) 2561-2564](#)
47. *Atomic hydrogen and liquid helium surfaces*,
J.T.M. Walraven
in: [Fundamental Systems in Quantum Optics](#), J. Dalibard, J.M. Raimond and J. Zinn-Justin
(Eds.), Elsevier Science Publishers, Amsterdam, 1992, pp. 487-544.
48. *Resonant light absorption and the problem of observing the Kosterlitz-Thouless transition in spin-polarized atomic hydrogen adsorbed on a liquid He surface*,
B.V. Svistunov, T.W. Hijmans, G.V. Shlyapnikov en J.T.M. Walraven,
[Phys. Rev. B 43 \(1991\) 13412-13416](#)
49. *Focusing of hydrogen atoms with a concave He-coated mirror*,
J.J. Berkhout, O.J. Luiten, I.D. Setija, T.W. Hijmans, T. Mizusaki and J.T.M. Walraven,
[Physica B 165&166 \(1990\) 11-12](#)

50. *Optical cooling of atomic hydrogen in a magnetic trap*,
T.W. Hijmans, O.J. Luiten, I.D. Setija and J.T.M. Walraven,
[J. Opt. Soc. Am. B 6 \(1989\) 2235-2243](#)
51. *Quantum reflection: focusing of hydrogen atoms with a concave spherical mirror*,
J.J. Berkhout, O.J. Luiten, I.D. Setija, T.W. Hijmans, T. Mizusaki and J.T.M. Walraven,
[Phys. Rev. Lett. 63 \(1989\) 1689-1692](#)
52. *Experiments with atomic hydrogen in magnetic trapping fields*,
R. van Roijen, J.J. Berkhout, S. Jaakkola, and J.T.M. Walraven,
[Phys. Rev. Lett. 61 \(1988\) 931](#)
53. *Surface three-body recombination in spin-polarized hydrogen*,
L.P.H. de Goey, H.T.C. Stoof, J.M.V.A. Koelman, B.J. Verhaar and J.T.M. Walraven,
[Phys. Rev. B 38 \(1988\) 11500](#)
54. *Lifetime of magnetically trapped ultra-cold deuterium gas*,
J.M.V.A. Koelman, H.T.C. Stoof, B.J. Verhaar and J.T.M. Walraven,
[Phys. Rev. B 38 \(1988\) 9319-9322](#)
55. *ESR experiments in spin-polarized atomic hydrogen*,
A.P.M. Matthey, J. van Zwol, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. B 37 \(1988\) 4831](#)
56. *Spin-polarized deuterium in magnetic traps*,
J.M.V.A. Koelman, H.T.C. Stoof, B.J. Verhaar and J.T.M. Walraven,
[Phys. Rev. Lett. 59 \(1987\) 676-679](#)
57. *Vanishing sticking probabilities and enhanced capillary flow of spin-polarized hydrogen*,
J.J. Berkhout, E.J. Wolters, R. van Roijen and J.T.M. Walraven,
[Phys. Rev. Lett. 57 \(1986\) 2387-2390](#)
58. *Experiments with "doubly"-spin-polarized hydrogen*,
R. Sprik, J.T.M. Walraven, G.H. van Yperen and I.F. Silvera,
[Phys. Rev. B 34 \(1986\) 6172-6182](#)
59. *Spin-polarized atomic hydrogen*
I.F. Silvera and J.T.M. Walraven
in: [Progr. Low Temp Phys.](#), D. Brewer (Ed.) Vol. X (1986) 139-370
60. *Compression experiments with spin-polarized atomic hydrogen*,
R. Sprik, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. B 32 \(1985\) 5668-5682](#)
61. *Spin waves in H^- adsorbed on a superfluid 4He film*,
J.M.V.A. Koelman, H.J.M.F. Noteborn, L.P.H. de Goey, B.J. Verhaar and J.T.M. Walraven,
[Phys. Rev. B 32 \(1985\) 7195-7198](#)
62. *Surface three-body recombination in spin-polarized atomic hydrogen*,
L.P.H. de Goey, J.P.J. Driessen, B.J. Verhaar and J.T.M. Walraven,
[Phys. Rev. Lett. 53 \(1984\) 1919-1922](#)
63. *The boson character of spin-polarized atomic hydrogen demonstrated in magnetic relaxation*,
A. Legendijk, G.H. van Yperen and J.T.M. Walraven,
J. de Phys. Lett. 45 (1984) L:929-933.
64. *Study of double polarized hydrogen by electron-spin resonance*,
G.H. van Yperen, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. B 30 \(1984\) 2386-2400](#)
65. *Compression of spin-polarized hydrogen to high density*,
R. Sprik, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. Lett. 51 \(1983\) 479-482](#)
66. *Direct microscopic study of double polarized atomic hydrogen by means of E.S.R.*,
G.H. van Yperen, I.F. Silvera, J.T.M. Walraven, J.J. Berkhout and J. Brisson,
[Phys. Rev. Lett. 50 \(1983\) 53-56](#)
67. *State dependent recombination and suppressed nuclear relaxation in atomic hydrogen*,
R. Sprik, J.T.M. Walraven, G.H. van Yperen and I.F. Silvera,
[Phys. Rev. Lett. 49 \(1982\) 153-157](#)
68. *Ballistic heat pulses in spin polarized atomic hydrogen to 200 mK*,
K.T. Salonen, I.F. Silvera, J.T.M. Walraven and G.H. van Yperen,
[Phys. Rev. B 25 \(1982\) 6002-6005](#)

69. *Helium temperature beam source of atomic hydrogen*,
J.T.M. Walraven and I.F. Silvera,
[Rev. Sci. Instr. 53 \(1982\) 1167-1181](#)
70. *Measurement of the static magnetization of spin-polarized atomic hydrogen with a squid magnetometer*,
J.T.M. Walraven and I.F. Silvera,
[Physica B&C 107 \(1981\) 517 - 518](#)
71. *Adsorption energy and nuclear relaxation of H^- on 3He - 4He mixtures*,
G.H. van Yperen, A.P.M. Matthey, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. Lett. 47 \(1981\) 800](#)
72. *Measurements of pressure of gaseous H^- : Adsorption energies and surface recombination rates on helium*,
A.P.M. Mattheij, J.T.M. Walraven and I.F. Silvera,
[Phys. Rev. Lett. 46 \(1981\) 668](#)
73. *Spin-polarized atomic deuterium: Stabilization, limitations on density and adsorption energy on helium*,
I.F. Silvera and J. T. M. Walraven,
[Phys. Rev. Lett. 45 \(1980\) 1268](#)
74. *Magnetic equation of state of a gas of spin-polarized atomic hydrogen*,
J.T.M. Walraven, I.F. Silvera and A.P.M. Mattheij,
[Phys. Rev. Lett. 45 \(1980\) 449](#).
75. *Density, magnetization, compression and thermal leakage of low-temperature atomic hydrogen*,
J. T. M. Walraven and I.F. Silvera,
[Phys. Rev. Lett. 44 \(1980\) 168](#)
76. *Stabilization of atomic hydrogen at low temperature*,
I.F. Silvera and J. T. M. Walraven,
[Phys. Rev. Lett. 44 \(1980\) 164](#)
77. *Direct determination of the temperature and density of gaseous atomic hydrogen at low temperature by atomic beam techniques*,
I.F. Silvera and J. T. M. Walraven,
[Phys. Lett. 74A \(1979\) 193](#)
78. *An atomic beam technique for the study of active solid nitrogen*,
J. T. M. Walraven, E.R. Eliel and I.F. Silvera,
[Phys. Lett. 73A \(1979\) 119](#)
79. *Experimental study of spin-aligned atomic hydrogen condensed on surfaces*,
J. T. M. Walraven, E.R. Eliel and I.F. Silvera,
[Phys. Lett. 66A \(1978\) 247](#)