

# Resume of Eite Tiesinga

## General Information

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## Education

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September 1984 - December 1988

Undergraduate student at the University of Groningen, Groningen, The Netherlands.

January 1989 - January 1993

PhD Graduate student at the Eindhoven University of Technology, Eindhoven, The Netherlands.

## Professional Experience

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May 1994 - April 1997

Guest researcher at the National Institute of Standards and Technology, Atomic Physics Division, Gaithersburg, Maryland.

June 1997 - February 2000

Research associate at the University of Maryland, Department of Chemistry and Biochemistry College Park, Maryland

February 2000 - July 2001

Contractual Researcher at the National Institute of Standards and Technology, Atomic Physics Division, Gaithersburg, Maryland.

July 2001 - present

Physicist at the National Institute of Standards and Technology, Atomic Physics Division, Gaithersburg, Maryland.

September 2006 - present

Adjunct Associate Professor at the Joint Quantum Institute, Department of Physics, University of Maryland, College Park, Maryland.

### List of publications

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1. E. Tiesinga, H.T.C. Stoof, and B.J. Verhaar, *Reflection of hydrogen atoms from the surface of superfluid helium*, Physical Review B **41**, 8886 (1990).
2. E. Tiesinga, H.T.C. Stoof, B.J. Verhaar and S.B. Crampton, *Spin-exchange frequency shift of the cryogenic deuterium maser*, Physica D **165&166**, 19 (1990).
3. E. Tiesinga, S.J.M. Kuppens, B.J. Verhaar, and H.T.C. Stoof, *Collisions between cold ground-state Na atoms*, Physical Review A **43**, 5188 (1991).
4. E. Tiesinga, B.J. Verhaar, H.T.C. Stoof and D. van Bragt, *Spin-exchange frequency shift in a cesium fountain*, Physical Review A **45**, 2671 (1992).
5. E. Tiesinga, A.J. Moerdijk, B.J. Verhaar, and H.T.C. Stoof, *Conditions for Bose-Einstein condensation in magnetically trapped cesium*, Physical Review A **46**, R1167 (1992).
6. E. Tiesinga, B.J. Verhaar and H.T.C. Stoof, *Threshold and resonance phenomena in ultracold ground-state collisions*, Physical Review A **47**, 4114 (1993).
7. E. Tiesinga, S.B. Crampton, B.J. Verhaar, and H.T.C. Stoof, *Collisional frequency shifts and line broadening in the cryogenic deuterium maser*, Physical Review A **47**, 4342 (1993).
8. H.M.J.M. Boesten, B.J. Verhaar, and E. Tiesinga, *Quantum suppression of collisional loss rates in optical traps*, Physical Review A **48**, 1428 (1993).
9. E. Tiesinga, *Comment on: "Elastic scattering of hydrogen atoms at low temperatures"*, Physical Review A **48**, 4801 (1993).
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11. C.J. Williams, E. Tiesinga, and P.S. Julienne, *Hyperfine structure of the  $\text{Na}_2 0_g^-$  long-range molecular state*, Physical Review A **53**, R1939 (1996).
12. K.M. Jones, P.S. Julienne, P.D. Lett, W.D. Phillips, E. Tiesinga, and C.J. Williams, *Measurement of the atomic  $\text{Na}(3P)$  lifetime and of retardation in the interaction between two atoms bound in a molecule*, Europhysics Letters **35**, 85 (1996).
13. E. Tiesinga, C.J. Williams, P.S. Julienne, K.M. Jones, P.D. Lett, and W.D. Phillips, *A spectroscopic determination of scattering lengths for sodium atom collisions*, Journal of Research of the National Institute of Standards and Technology, **101**, 505 (1996).

14. P.S. Julienne, F.H. Mies, E. Tiesinga and C.J. Williams, *Collisional Stability of double Bose condensates*, Physical Review Letters **78**, 1880 (1997).
15. X. Wang, H. Wang, P.L. Gould, W.C. Stwalley, E. Tiesinga, and P.S. Julienne, *Observation of the Pure Long-Range  $1_u$  state of an alkali-metal dimer by photoassociative spectroscopy*, Physical Review A, **57**, 4600 (1998).
16. E. Tiesinga, C.J. Williams, and P.S. Julienne, *Photoassociative spectroscopy of highly excited vibrational levels of alkali dimers: Green function approach for eigenvalue solvers*, Physical Review A, **57**, 4257 (1998).
17. P.S. Julienne, K.M. Jones, P.D. Lett, W.D. Phillips, E. Tiesinga, U. Volz, and C.J. Williams, Atomic collisions in Ultra-cold atomic gases, *Photonic, electronic and atomic collisions*, edited by F. Aumayr and H. Winter (World Scientific, Singapore, 1998).
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46. V. Venturi, P.J. Leo, E. Tiesinga, C.J. Williams, and I.B. Whittingham, *Purely-long range bound states of  $\text{He}(2s\ ^3S)+\text{He}(2p\ ^3P)$* , Physical Review A **68**, 022706 (2003).
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63. E. Tiesinga, K. M. Jones, P. D. Lett, U. Volz, C. J. Williams, and P. S. Julienne, *Measurement and modeling of hyperfine- and rotation-induced state mixing in large weakly-bound sodium dimers*, Physical Review A **71**, 052703 (2005).
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