

Publications

(June 2005)

I. Papers (in refereed journals) and major book chapters

1. Y. Shin, C. Sanner, G.-B. Jo, T. A. Pasquini, M. Saba, W. Ketterle, D. E. Pritchard, M. Vengalattore and M. Prentiss:
Interference of Bose-Einstein Condensates on an Atom Chip.
preprint, cond-mat 0506464.
2. M.W. Zwierlein, J.R. Abo-Shaeer, A. Schirotzek, C.H. Schunck, and W. Ketterle:
Vortices and Superfluidity in a Strongly Interacting Fermi Gas.
Nature **435**, 1047-1051 (2005).
3. C. A. Stan and W. Ketterle:
Multiple species atom source for laser-cooling experiments.
Rev. Sci. Instrum. **76**, 063113 (2005).
4. G.K. Campbell, A.E. Leanhardt, J. Mun, M. Boyd, E.W. Streed, W. Ketterle, and D.E. Pritchard:
Photon Recoil Momentum in Dispersive Media.
Phys. Rev. Lett. **94**, 170403 (2005).
5. S. V. Nguyen, J. S. Helton, K. Maussang, W. Ketterle, and John M. Doyle:
Magnetic trapping of an atomic ^{55}Mn - ^{52}Cr mixture.
Phys. Rev. A **71**, 025602 (2005).
6. D.E. Miller, J.R. Anglin, J.R. Abo-Shaeer, K. Xu, J.K. Chin and W. Ketterle:
High-Contrast Interference in a Thermal Cloud of Atoms.
Phys Rev. A **71**, 043615 (2005).
7. M.W. Zwierlein, C.H. Schunck, C.A. Stan, S.M.F. Raupach, and W. Ketterle:
Formation time of a Fermion Pair Condensate.
Phys. Rev. Lett. **94**, 180401 (2005).
8. M. Saba, T.A. Pasquini, C. Sanner, Y. Shin, W. Ketterle, and D.E. Pritchard:
Continuous measurement of the relative phase of two Bose-Einstein condensates using light scattering.
Science **307**, 1945-1948 (2005)
9. J.R. Abo-Shaeer, D.E. Miller, J.K. Chin, K. Xu, T. Mukaiyama, and W. Ketterle:
Coherent Molecular Optics using Sodium Dimers.
Phys. Rev. Lett. **94**, 040405 (2005).
10. C.H. Schunck, M.W. Zwierlein, C.A. Stan, S.M.F. Raupach, W. Ketterle, A. Simoni, E. Tiesinga, C.J. Williams, and P.S. Julienne:
Feshbach Resonances in Fermionic ^6Li .
Phys. Rev. A **71**, 045601 (2005).
11. Y. Shin, M. Saba, M. Vengalattore, T. A. Pasquini, C. Sanner, A. E. Leanhardt, M. Prentiss, D. E. Pritchard, and W. Ketterle:
Dynamical Instability of a Doubly Quantized Vortex in a Bose-Einstein condensate.
Phys. Rev. Lett. **93**, 160406 (2004)
12. C.A. Stan, M.W. Zwierlein, C.H. Schunck, S.M.F. Raupach, and W. Ketterle:
Observation of Feshbach resonances between two different atomic species.
Phys. Rev. Lett. **93**, 143001 (2004).

13. T.A. Pasquini, Y. Shin, C. Sanner, M. Saba, A. Schirotzek, D.E. Pritchard, and W. Ketterle:
Quantum reflection of atoms from a solid surface at normal incidence.
Phys. Rev. Lett. **93**, 223201 (2004).
14. M.W. Zwierlein, C.A. Stan, C.H. Schunck, S.M.F. Raupach, A.J. Kerman, and W. Ketterle:
Condensation of Pairs of Fermionic Atoms Near a Feshbach Resonance.
Phys. Rev. Lett. **92**, 120403 (2004).
15. T. Mukaiyama, J. R. Abo-Shaeer, K. Xu, J. K. Chin, and W. Ketterle:
Dissociation and Decay of Ultracold Sodium Molecules.
Phys. Rev. Lett. **92**, 180402 (2004).
16. J.G.E. Harris, R.A. Michniak, S.V. Nguyen, W. Ketterle, and J.M. Doyle:
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Europhys. Lett. **67**, 198–204 (2004).
17. Y. Shin, M. Saba, A. Schirotzek, T.A. Pasquini, A.E. Leanhardt, D.E. Pritchard, and W. Ketterle:
Distillation of Bose-Einstein condensates in a double-well potential.
Phys. Rev. Lett. **92**, 150401 (2004).
18. D. Schneble, G.K. Campbell, E.W. Streed, M. Boyd, D.E. Pritchard, and W. Ketterle:
Raman Amplification of Matter Waves.
Phys. Rev. A **69**, 041601(R) (2004).
19. S. Gupta, Z. Hadzibabic, J.R. Anglin, and W. Ketterle:
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Phys. Rev. Lett. **92**, 100401 (2004).
20. Y. Shin, M. Saba, T. Pasquini, W. Ketterle, D.E. Pritchard, and A.E. Leanhardt:
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Phys. Rev. Lett. **92**, 050405 (2004).
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Phys. Rev. Lett. **91**, 210402 (2003).
23. A.E. Leanhardt, T.A. Pasquini, M. Saba, A. Schirotzek, Y. Shin, D. Kielpinski, D.E. Pritchard, and W. Ketterle:
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24. M.W. Zwierlein, Z. Hadzibabic, S. Gupta, and W. Ketterle:
Spectroscopic insensitivity to cold collisions in a two-state mixture of fermions.
Phys. Rev. Lett. **91**, 250404 (2003).
25. Z. Hadzibabic, S. Gupta, C.A. Stan, C.H. Schunck, M.W. Zwierlein, K. Dieckmann, and W. Ketterle:
Fifty-fold improvement in the number of quantum degenerate fermionic atoms.
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RF Spectroscopy of Ultracold Fermions.
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27. D. Schneble, Y. Torii, M. Boyd, E.W. Streed, D.E. Pritchard, and W. Ketterle:
The Onset of Matter-Wave Amplification in a Superradiant Bose-Einstein Condensate.
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Amplification of Local Instabilities in a Bose-Einstein Condensate with Attractive Interactions.
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Sodium Bose-Einstein Condensates in the $F=2$ State in a Large-volume Optical Trap.
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33. W. Ketterle:
When atoms behave as waves: Bose-Einstein condensation and the atom laser.
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