

Publications - Nikolaj Thomas Zinner

110 peer-reviewed papers (inkl. 10 singly-authored papers) and about 25 conference proceedings.

Selected peer-reviewed papers

1. O. V. Marchukov, A. G. Volosniev, M. Valiente, D. Petrosyan, and N. T. Zinner:
Quantum spin transistor with a Heisenberg spin chain,
Nature Communications **7**, 13070 (2016).
2. L. J. Wacker, N. B. Jørgensen, D. Birkmose, N. Winter, M. Mikkelsen, J. Sherson, N. Zinner, and J. J. Arlt:
Absence of observable Efimov resonances in ultracold KRb mixtures,
Phys. Rev. Lett. **117**, 163201 (2016).
3. N. J. S. Loft, L. B. Kristensen, A. E. Thomsen, A. G. Volosniev, and N. T. Zinner:
CONAN – the cruncher of local exchange coefficients for strongly interacting confined systems in 1D,
Computer Physics Communications **209** 171-182 (2016).
4. M. E. S. Andersen, A. S. Dehkharghani, A. G. Volosniev, E. J. Lindgren, and N. T. Zinner:
An interpolatory ansatz for describing one-dimensional confined Fermi systems,
Scientific Reports **6**, 28362 (2016).
5. F. F. Bellotti, T. Frederico, M. T. Yamashita, D. V. Fedorov, A. S. Jensen, and N. T. Zinner:
Three-body bound states of two bosonic impurities immersed in a Fermi in 2D,
New Journal of Physics **18**, 043023 (2016).
6. A. G. Volosniev, H.-W. Hammer, and N. T. Zinner:
Simulation of Quantum Heisenberg Hamiltonians in 1D,
Phys. Rev. B **93**, 094414 (2016).
7. A. S. Dehkharghani, A. G. Volosniev, E. J. Lindgren, J. Rotureau, C. Forssén, D. V. Fedorov, A. S. Jensen, and N. T. Zinner:
Quantum magnetism in strongly interacting one-dimensional spinor Bose systems,
Scientific Reports **5**, 10675 (2015).
8. A. G. Volosniev, D. V. Fedorov, A. S. Jensen, M. Valiente, and N. T. Zinner:
Strongly-interacting fermions in one dimension and microscopic magnetism,
Nature Communications **5**, 5300 (2014).
9. N. T. Zinner, A. G. Volosniev, D. V. Fedorov, A. S. Jensen, and M. Valiente:
Fractional energy states of strongly-interacting bosons in one dimension,
Europhysics Letters **107**, 60003 (2014).
10. N. T. Zinner:
Efimov States of Heavy Impurities in a Bose-Einstein Condensate,
Europhysics Letters **101**, 60009 (2013).
11. N. T. Zinner and A. S. Jensen:
Comparing and contrasting nuclei and cold atomic gases,
J. Phys. G: Nucl. Part. Phys. **40** 053101 (2013).
12. N. T. Zinner, B. Wunsch, D. Pekker, and D.-W. Wang:
BCS-BEC Crossover in Bilayers of Cold Polar Fermionic Molecules,
Phys. Rev. A **85**, 013603 (2012).
13. B. Wunsch, N. T. Zinner, I. B. Mekhov, S.-J. Huang, D.-W. Wang, and E. Demler:
Few-body bound states in dipolar gases and their detection,
Phys. Rev. Lett. **107**, 073201 (2011).
14. A. G. Volosniev, D. V. Fedorov, A. S. Jensen and N. T. Zinner:
Model independence in two dimensions and polarized cold dipolar molecules,
Phys. Rev. Lett. **106**, 050402 (2011).
15. D. Pekker, M. Babadi, R. Sensarma, N. Zinner, L. Pollet, M. W. Zwierlein, and E. Demler:
Competition between pairing and ferromagnetic instabilities in ultracold Fermi gases near Feshbach resonances,
Phys. Rev. Lett. **106**, 050402 (2011).
16. I. Zapata, B. Wunsch, N. T. Zinner, and E. Demler:
 π -Phases in Balanced Fermionic Superfluids on Spin-dependent Optical Lattices,
Phys. Rev. Lett. **105**, 095301 (2010).