

Literaturverzeichnis

- [Andrews et al., 1997] Andrews, M. R., Townsend, C. G., Miesner, H.-J., Durfee, D. S., Kurn, D. M., and Ketterle, W. (1997). Observation of interference between two bose condensates. *Science*, 275(5300):637–641.
- [Böning et al., 2011] Böning, J., Filinov, A., and Bonitz, M. (2011). Crystallization of an exciton superfluid. *Phys. Rev. B*, **84**:075130.
- [Bonitz, 1998] Bonitz, M. (1998). Bringt die Computer-Revolution das Ende der Statistischen Physik? Habilvortrag, unpublished.
- [Bonitz, 2016] Bonitz, M. (2016). *Quantum Kinetic Theory*. Springer, Cham, 2 edition.
- [Bonitz and (eds.), 2006] Bonitz, M. and (eds.), D. S. (2006). *Introduction to Computational Methods in Many Body Physics*. Rinton Press, Princeton.
- [Bonitz et al., 2010a] Bonitz, M., Henning, C., and Block, D. (2010a). Complex plasmas: a laboratory for strong correlations. *Rep. Prog. Phys.*, **73**(6):066501.
- [Bonitz et al., 2010b] Bonitz, M., Horing, N., and Ludwig, P., editors (2010b). *Introduction to Complex Plasmas*. Springer.
- [Bonitz and Kordts, 2025] Bonitz, M. and Kordts, L. (2025). Ionization potential depression and Fermi barrier in warm dense matter—a first—principles approach. *Contrib. Plasma Phys.*, *submitted*.
- [Butov et al., 2002] Butov, L. V., Lai, C. W., Ivanov, A. L., Gossard, A. C., and Chemla, D. S. (2002). Towards bose–einstein condensation of excitons in potential traps. *Nature*, 417(6884):47–52.
- [Ceperley and Alder, 1980] Ceperley, D. M. and Alder, B. J. (1980). Ground state of the electron gas by a stochastic method. *Phys. Rev. Lett.*, 45:566–569.
- [Dalfovo et al., 1999] Dalfovo, F., Giorgini, S., Pitaevskii, L. P., and Stringari, S. (1999). Theory of bose–einstein condensation in trapped gases. *Rev. Mod. Phys.*, 71:463–512.
- [Deutsch, 1991] Deutsch, J. M. (1991). Quantum statistical mechanics in a closed system. *Phys. Rev. A*, 43:2046–2049.
- [Dornheim et al., 2018] Dornheim, T., Groth, S., and Bonitz, M. (2018). The uniform electron gas at warm dense matter conditions. *Phys. Rep.*, **744**:1 – 86.
- [Dornheim et al., 2015] Dornheim, T., Groth, S., Filinov, A., and Bonitz, M. (2015). Permutation blocking path integral Monte Carlo: a highly efficient approach to the simulation of strongly degenerate non-ideal fermions. *New J. Phys.*, **17**(7):073017.

- [Dornheim et al., 2016] Dornheim, T., Groth, S., Sjostrom, T., Malone, F. D., Foulkes, W. M. C., and Bonitz, M. (2016). Ab Initio Quantum Monte Carlo Simulation of the Warm Dense Electron Gas in the Thermodynamic Limit. *Phys. Rev. Lett.*, **117**:156403.
- [Dornheim et al., 2022] Dornheim, T., Moldabekov, Z., Vorberger, J., Kählert, H., and Bonitz, M. (2022). Electronic pair alignment and roton feature in the warm dense electron gas. *Communications Physics*, **5**(1):304.
- [Durrer, 2021] Durrer, R. (2021). *The Cosmic Microwave Background*. Cambridge University Press, Cambridge.
- [Filinov et al., 2009] Filinov, A., Ludwig, P., Bonitz, M., and Lozovik, Y. E. (2009). Effective interaction potential and superfluid–solid transition of spatially indirect excitons. *J. Phys. A: Math. Theor.*, **42**(21):214016.
- [Filinov et al., 2010] Filinov, A., Prokof'ev, N. V., and Bonitz, M. (2010). Berezinskii-Kosterlitz-Thouless Transition in Two-Dimensional Dipole Systems. *Phys. Rev. Lett.*, **105**:070401.
- [Golden and Kalman, 2000] Golden, K. I. and Kalman, G. J. (2000). Quasilocalized charge approximation in strongly coupled plasma physics. *Physics of Plasmas*, **7**(1):14–32.
- [Greiner et al., 1993] Greiner, W., Neise, L., and Stöcker, H. (1993). *Thermodynamik und Statistische Physik*. Verlag Harri Deutsch, 2. edition.
- [Groth et al., 2017] Groth, S., Dornheim, T., Sjostrom, T., Malone, F. D., Foulkes, W. M. C., and Bonitz, M. (2017). Ab initio Exchange-Correlation Free Energy of the Uniform Electron Gas at Warm Dense Matter Conditions. *Phys. Rev. Lett.*, **119**:135001.
- [Groth et al., 2016] Groth, S., Schoof, T., Dornheim, T., and Bonitz, M. (2016). Ab initio quantum Monte Carlo simulations of the uniform electron gas without fixed nodes. *Phys. Rev. B*, **93**:085102.
- [Hunger et al., 2021] Hunger, K., Schoof, T., Dornheim, T., Bonitz, M., and Filinov, A. (2021). Momentum distribution function and short-range correlations of the warm dense electron gas: Ab initio quantum monte carlo results. *Phys. Rev. E*, **103**:053204.
- [Klaers et al., 2010] Klaers, J., Schmitt, J., Vewinger, F., and Weitz, M. (2010). Bose–Einstein condensation of photons in an optical microcavity. *Nature*, **468**(7323):545–548.
- [Kremp et al., 2005] Kremp, D., Schlanges, M., and Kraeft, W.-D. (2005). *Quantum Statistics of Nonideal Plasmas*. Springer, Heidelberg.
- [Mahan, 2008] Mahan, G. (2008). *Many-Particle Physics*. Springer.
- [Schoof et al., 2011] Schoof, T., Bonitz, M., Filinov, A., Hochstuhl, D., and Dufty, J. (2011). Configuration path integral Monte Carlo. *Contrib. Plasma Phys.*, **51**:687–697.
- [Schoof et al., 2015] Schoof, T., Groth, S., Vorberger, J., and Bonitz, M. (2015). Ab Initio thermodynamic results for the degenerate electron gas at finite temperature. *Phys. Rev. Lett.*, **115**:130402.
- [Srednicki, 1994] Srednicki, M. (1994). Chaos and quantum thermalization. *Phys. Rev. E*, **50**:888–901.

[Vidmar and Rigol, 2016] Vidmar, L. and Rigol, M. (2016). Generalized gibbs ensemble in integrable lattice models. *Journal of Statistical Mechanics: Theory and Experiment*, 2016(6):064007.