

Curriculum Vitae

Prof. Dr. Christian Hainzl

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Personal Data

- **Date of birth:** 03.05.1972
- **Gender:** Male
- **Children:** Two (ages 18 and 20)

Academic Appointments

- Since 2019: Professor (W3), LMU Munich
- 2010–2019: Professor (W3), University of Tübingen
- 2009–2010: Associate Professor (tenured), University of Alabama at Birmingham (UAB)
- 2005–2009: Assistant Professor (tenure track), UAB
- 2004–2005: Postdoctoral Fellow, University of Copenhagen
- 2003–2004: Postdoctoral Fellow, CEREMADE, Paris Dauphine
- 2000–2001: Assistant, Institute for Theoretical Physics, University of Vienna

Education

- 1999: Ph.D. in Mathematical Physics, University of Vienna
Advisor: Jakob Yngvason
- 1996: Diploma in Mathematics, Technical University of Vienna
Advisor: Christian Schmeiser
- 1991–1997: Studies in Mathematics, TU Vienna
- 1994–1997: Studies in Physics, University of Vienna

Grants and Fellowships

- 2008–2010: US NSF Grant DMS-0800906
- 2001–2003: Marie-Curie Fellowship, LMU Munich

Administrative Service

- Since 2022: Speaker of the SFB/TRR “Mathematics of Many-Body Quantum Systems and their Collective Phenomena”
- 2008–2010: Head of the Institute of Mathematics, LMU Munich
- 2014–2018: Head of the Department of Mathematics, University of Tübingen

Selected Publications (10)

1. E. L. Giacomelli, C. Hainzl, P. T. Nam, R. Seiringer, *The Huang–Yang Conjecture for the Low-Density Fermi Gas*, arXiv:2505.22340 (2025), 65 pages.
2. M. R. Christiansen, C. Hainzl, P. T. Nam, *The Correlation Energy of the Electron Gas in the Mean-Field Regime*, arXiv:2405.01386 (2024).
3. F. Haberberger, C. Hainzl, P. T. Nam, R. Seiringer, A. Triay, *The Free Energy of Dilute Bose Gases at Low Temperatures*, arXiv:2304.02405 (2024).
4. M. R. Christiansen, C. Hainzl, P. T. Nam, *The Random Phase Approximation for Interacting Fermi Gases in the Mean-Field Regime*, Forum Math. Pi 11, e32 (2023).
5. T. Chen, C. Hainzl, N. Pavlović, and R. Seiringer, *Unconditional uniqueness for the cubic Gross–Pitaevskii hierarchy via quantum de Finetti*, Comm. Pure Appl. Math. 68 (2015), 1845–1884.
6. R. L. Frank, C. Hainzl, R. Seiringer, and J. P. Solovej, *Microscopic derivation of Ginzburg–Landau theory*, J. Amer. Math. Soc. 25 (2012), 667–713.
7. C. Hainzl, M. Lewin, and J. P. Solovej, *The thermodynamic limit of quantum Coulomb systems. Part I: General theory*, Adv. Math. 221 (2009), 454–487.
8. C. Hainzl, E. Hamza, R. Seiringer, and J. P. Solovej, *The BCS functional for general pair interactions*, Comm. Math. Phys. 281 (2008), 349–367.
9. C. Hainzl and R. Seiringer, *Critical temperature and energy gap for the BCS equation*, Phys. Rev. B 77 (2008), 184517.
10. C. Hainzl, M. Lewin, and J. P. Solovej, *The mean-field approximation in quantum electrodynamics: the no-photon case*, Comm. Pure Appl. Math. 60 (2007), 546–596.
11. C. Hainzl, M. Lewin, and É. Séré, *Existence of a stable polarized vacuum in the Bogoliubov–Dirac–Fock approximation*, Comm. Math. Phys. 257 (2005), 515–562.