

GRIMM Rudolf

Date and place of birth: 10 Nov 1961, Mannheim (Germany)

Nationality: Austrian and German

Affiliations: Institute of Experimental Physics, Univ. of Innsbruck, and Institute for Quantum Optics and Quantum Information (IQOQI), Austrian Academy of Sciences, 6020 Innsbruck, Austria.

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Academic Career

- 1980 – 1986** Study of physics, Univ. of Hannover, Germany
- 1986 – 1989** PhD student, Swiss Federal Inst. of Technology (ETH), Zurich, Switzerland
- 1989 – 1990** Visiting scientist, Inst. of Spectroscopy, Troitsk/Moscow, USSR
- 1990 – 2000** Researcher, Max-Planck-Inst. for Nuclear Physics, Heidelberg, Germany
- 1994 – 2000** Lecturer, Univ. of Heidelberg, Germany
- 2000 – now** Professor of Experimental Physics, Univ. of Innsbruck, Austria
- 2003 – now** Scientific Director at IQOQI

Professional Activities

- 2005 – 2008** Dean of the Faculty for Mathematics, Computer Science, and Physics at Innsbruck University
- 2005 – 2008** Co-Editor Europhys. Lett.
- 2005 – 2007** Europ. Phys. Society, At. Mol. Physics Division (AMOPD), Committee member
- 2005 – 2011** Board member (deputy for experimental physics), Austrian Science Fund FWF
- 2006 – 2009** Head of the Center for Quantum Physics, Univ. of Innsbruck
- 2009 – 2013** Head of Innsbruck Physics Research Center, Univ. of Innsbruck
- 2012 – 2014** Managing Director of IQOQI Innsbruck
- 2014 – 2019** Speaker of the International Advisory Board, Kazan Federal University, Russia
- 2017 – 2021** Head of the Institute of Experimental Physics, Univ. of Innsbruck
- 2020 – now** Member of the Committee of Experts for the German Excellence Strategy
- 2021 – now** Member of Committee C15: AMO Physics, IUPAP
- 2022 – now** Managing Director of IQOQI Innsbruck
- 2023** Member of the Evaluation Panel for Physics, Univ. Olomouc, Czech Rep.

Awards/Honors

- 1989** Silver medal for outstanding PhD thesis, ETH Zurich
- 1996** Gerhard-Hess-Award of the German Research Foundation (DFG)
- 2005** elected Corresponding Member of the Austrian Academy of Sciences
- 2005** Wittgenstein Award
- 2005** “Austrian” of the Year (area of research), selected by Newspaper Die Presse
- 2006** elected Full Member of the Austrian Academy of Sciences
- 2006** Beller Lectureship Award of the American Physical Society
- 2007** Fellow of the American Physical Society
- 2008** Science Prize of the State of Tyrol (Tiroler Landespreis für Wissenschaft)
- 2009** Frew Fellowship (Australian Academy of Science)
- 2010** Austrian Scientist of the Year 2009, elected by the Austrian Club of Education and Science Journalists
- 2018** Faddeev medal (American Physical Society and European Research Committee on Few-Body Problems in Physics)
- 2021** ERC Advanced Grant
- 2021** TOPTICA Senior BEC Award

GRIMM Rudolf - 25 selected publications

For a complete list of publications see

<https://orcid.org/0000-0003-1085-5558> or <http://www.researcherid.com/rid/D-2864-2009>

1. C. Baroni, B. Huang, I. Fritsche, E. Dobler, G. Anich, E. Kirilov, R. Grimm, M. A. Bastarrachea-Magnani, P. Massignan, G. M. Bruun
Mediated interactions between Fermi polarons and the role of impurity quantum statistics
Nature Phys. **20**, 68 (2024)
2. E. Soave, A. Canali, Z.-X. Ye, M. Kreyer, E. Kirilov, and R. Grimm
Optically trapped Feshbach molecules of fermionic ^{161}Dy and ^{40}K
Phys. Rev. Research **5**, 033117 (2023)
3. C. Ravensbergen, E. Soave, V. Corre, M. Kreyer, B. Huang, E. Kirilov, R. Grimm
Resonantly Interacting Fermi-Fermi Mixture of ^{161}Dy and ^{40}K
Phys. Rev. Lett. **124**, 203402 (2020)
4. R. S. Lous, I. Fritsche, M. Jag, F. Lehmann, E. Kirilov, B. Huang, R. Grimm
Probing the Interface of a Phase-Separated State in a Repulsive Bose-Fermi Mixture
Phys. Rev. Lett. **120**, 243403 (2018)
5. M. Cetina, M. Jag, R. S. Lous, I. Fritsche, J. T. M. Walraven, R. Grimm, J. Levinsen, M. M. Parish, R. Schmidt, M. Knap, E. Demler
Ultrafast many-body interferometry of impurities coupled to a Fermi sea
Science **354**, 96 (2016)
6. B. Huang, L. Sidorenkov, R. Grimm, J. M. Hutson
Observation of the second triatomic resonance in Efimov's scenario
Phys. Rev. Lett. **112**, 190401 (2014)
7. L. Sidorenkov, M. K. Tey, R. Grimm, Y.-H. Hou, L. Pitaevskii, S. Stringari
Second sound and the superfluid fraction in a Fermi gas with resonant interactions
Nature **498**, 78 (2013)
8. C. Kohstall, M. Zaccanti, M. Jag, A. Trenkwalder, P. Massignan, G. M. Bruun, F. Schreck, and R. Grimm
Metastability and coherence of repulsive polarons in a strongly interacting Fermi mixture
Nature **485**, 615 (2012)
9. K. Aikawa, A. Frisch, M. Mark, S. Baier, A. Rietzler, R. Grimm, and F. Ferlaino
Bose-Einstein condensation of erbium
Phys. Rev. Lett. **108**, 210401 (2012)
10. C. Chin, R. Grimm, P. Julienne, and E. Tiesinga
Feshbach resonances in ultracold gases
Rev. Mod. Phys. **82**, 1225 (2010)
11. S. Stellmer, M. K. Tey, B. Huang, R. Grimm, F. Schreck
Bose-Einstein condensation of strontium
Phys. Rev. Lett. **103**, 200401 (2009)
12. K. Winkler, G. Thalhammer, F. Lang, R. Grimm, J. Hecker Denschlag, A. Daley, A. Kantian, H.-P. Büchler, and P. Zoller
Repulsively bound pairs in an optical lattice
Nature **441**, 853 (2006)

13. T. Kraemer, M. Mark, P. Waldburger, J. G. Danzl, C. Chin, B. Engeser, A. D. Lange, K. Pilch, A. Jaakkola, H.-C. Nägerl, and R. Grimm
Evidence for Efimov quantum states in ultracold gas of caesium atoms
Nature **440**, 315 (2006)
14. M. Theis, G. Thalhammer, K. Winkler, M. Hellwig, G. Ruff, R. Grimm, and J. Hecker Denschlag
Tuning the scattering length with an optically induced Feshbach resonance
Phys. Rev. Lett. **93**, 123001 (2004)
15. C. Chin, M. Bartenstein, A. Altmeyer, S. Riedl, S. Jochim, J. Hecker Denschlag, and R. Grimm
Observation of the pairing gap in a strongly interacting Fermi gas
Science **305**, 1128 (2004)
16. M. Bartenstein, A. Altmeyer, S. Riedl, S. Jochim, C. Chin, J. Hecker Denschlag and R. Grimm
Collective excitations of a degenerate gas at the BEC-BCS crossover
Phys. Rev. Lett. **92**, 203201 (2004)
17. M. Bartenstein, A. Altmeyer, S. Riedl, S. Jochim, C. Chin, J. Hecker Denschlag and R. Grimm
Crossover from a molecular Bose-Einstein condensate to a degenerate Fermi gas
Phys. Rev. Lett. **92**, 120401 (2004)
18. S. Jochim, M. Bartenstein, A. Altmeyer, G. Hendl, S. Riedl, C. Chin, J. Hecker Denschlag, and R. Grimm
Bose-Einstein condensation of molecules
Science **302**, 2101 (2003)
19. J. Herbig, T. Kraemer, M. Mark, T. Weber, C. Chin, H.-C. Nägerl, and R. Grimm
Preparation of a pure molecular quantum gas
Science **301**, 1510 (2003)
20. T. Weber, J. Herbig, M. Mark, H.-C. Nägerl, and R. Grimm
Bose-Einstein condensation of cesium
Science **299**, 232 (2003)
21. R. Grimm, M. Weidemüller, and Yu. B. Ovchinnikov
Optical dipole traps for neutral atoms
Adv. At. Mol. Opt. Phys. **42**, 95 (2000)
22. Yu. B. Ovchinnikov, I. Manek, and R. Grimm
Surface trap for Cs atoms based on evanescent-wave cooling
Phys. Rev. Lett. **79**, 2225 (1997)
23. J. Söding, R. Grimm, Yu. B. Ovchinnikov, P. Bouyer, and C. Salomon
Short-distance atomic beam slowing with a stimulated light force
Phys. Rev. Lett. **78**, 1420 (1997)
24. R. Grimm, Yu. B. Ovchinnikov, A. Sidorov, and V. S. Letokhov
Observation of a strong rectified dipole force in a bichromatic standing light wave
Phys. Rev. Lett. **65**, 1415 (1990)
25. R. Grimm and J. Mlynek
The effect of resonant light pressure in saturation spectroscopy
Appl. Phys. B **49**, 179 (1989)