

Thomas Udem, Publications

1. **Theoretical Approach for collisional Depolarization of Rydberg Atoms**
G. Hermann, B. Kaulakys, and T. Udem, Z. Phys. D, 28, 119 (1993).
2. **Calculated Transmission Line Structures of a Coherent Forward Scattering Resonance Monochromator (CFSRM)**
G. Hermann, T. Udem, K. Hirokawa, and H. Matsuta, Spectr. Chem. Acta B, 4, 355 (1994).
3. **Precision Spectroscopy in Atomic Hydrogen**
D. Leibfried, H. Geiger, A. Huber, W. König, K. Pachucki, M. Prevedelli, T. Udem, J. Walz, M. Weitz, C. Zimmermann, and T.W. Hänsch, Proceedings of the XII International Conference on Laser Spectroscopy (ICOLS95), M. Inguscio, M. Allegrini, and A. Sasso eds., World Scientific, Singapore p. 83 (1996).
4. **Precision Measurements in Atomic Hydrogen**
M. Weitz, D. Leibfried, A. Huber, H. Geiger, W. König, M. Prevedelli, Th. Udem, T. Heupel, K. Pachucki, and T.W. Hänsch, Proceedings of the Fifth Symposium on Frequency Standards and Metrology, J. C. Bergquist, ed., World Scientific, Singapore p. 137 (1996).
5. **A Phase-Coherent Frequency Chain Connecting a Methane Stabilized He-Ne Laser to the Hydrogen L- α Transition Frequency**
Th. Udem, A. Huber, M. Weitz, D. Leibfried, W. König, M. Prevedelli, A. Dmitriev, and T.W. Hänsch, Proceedings of the Workshop Frequency Standards Based on Laser-Manipulated Atoms and Ions, J. Helmcke and S. Penselin eds., PTB-Opt-51, Braunschweig, p. 77, April 1996.
6. **Phase-Coherent Measurement of the Hydrogen 1S–2S Frequency with an Optical Frequency Interval Divider Chain**
Th. Udem, A. Huber, M. Weitz, D. Leibfried, W. König, M. Prevedelli, A. Dimitriev, H. Geiger, and T.W. Hänsch, IEEE Trans. Instrum. Meas., 46, 166 (1997).
7. **Phase-Coherent Measurement of the Hydrogen 1S–2S Transition Frequency with an Optical Frequency Interval Divider Chain**
Th. Udem, A. Huber, B. Gross, J. Reichert, M. Prevedelli, M. Weitz, and T. W. Hänsch, Phys. Rev. Lett., 79, 2646 (1997).
8. **Hydrogen-Deuterium 1S–2S Isotope Shift and the Structure of the Deuteron**
A. Huber, Th. Udem, B. Gross, J. Reichert, M. Kourogi, K. Pachucki, M. Weitz, and T.W. Hänsch, Phys. Rev. Lett., 80, 468 (1998).
9. **Phase-Coherent Frequency Measurement of the Hydrogen 1S–2S Transition**
Th. Udem, A. Huber, J. Reichert, B. Gross, M. Prevedelli, M. Weitz, M. Kourogi, and T.W. Hänsch, Proceedings of the XIII International Conference on Laser Spectroscopy (ICOLS97), Z.J. Wang, Z.M. Zhang and Y.Z. Wang eds., World Scientific, Singapore p. 87 (1998).

10. **Accuracy of Optical Frequency Comb Generators and Optical Frequency Interval Divider Chains**
Th. Udem, J. Reichert, and T.W. Hänsch, Opt. Lett., 23, 1387 (1998).
11. **Accurate Measurement of Large Optical Frequency Differences with a Mode-Locked Laser**
Th. Udem, J. Reichert, R. Holzwarth, and T.W. Hänsch, Opt. Lett., 24, 881 (1999).
12. **Absolute Optical Frequency Measurement of the Cesium D₁ Line with a Mode Locked Laser**
Th. Udem, J. Reichert, R. Holzwarth, and T.W. Hänsch, Phys. Rev. Lett., 82, 3568 (1999).
13. **Absolute Frequency Measurement of the ¹¹⁵In⁺ 5s² 1S₀-5s5p 3P₀ Transition**
J. von Zanthier, J. Abel, Th. Becker, M. Fries, E. Peik, H. Walther, R. Holtzwarth, J. Reichert, Th. Udem, T.W. Hänsch, A.Yu. Nevsky, M.N. Skvortsov, and S.N. Bagayev, Opt. Commun., 166, 57 (1999).
14. **The Measurement of Large Optical Frequency Differences and the Design of a New Type of Frequency Chain**
Thomas Udem, Jörg Reichert, Ronald Holzwarth, Theodor Hänsch and Motonobu Kourogi, Proceedings of the 1999 Joint Meeting of the *European Frequency and Time Forum (EFTF99)* and the *IEEE International Frequency Control Symposium (FCS99)*, vol. 2, p. 620 (1999).
15. **Measuring Optical Frequencies with Femtosecond Light Pulses**
R. Holzwarth, J. Reichert, M. Niering, M. Weitz, Th. Udem, and T.W. Hänsch, Proceedings of the XIV *International Conference on Laser Spectroscopy (ICOLS99)*, R. Blatt, J. Eschner, D. Leibfried, and F. Schmidt-Kaler eds., World Scientific, Singapore p. 347 (1999).
16. **Auf dem Weg zur Laser-Uhr**
Thomas Udem, Jörg Reichert, Ronald Holzwarth, Theodor Hänsch, Physik in unserer Zeit, 5, 223 (1999).
17. **Measuring the Frequency of Light with Mode-Locked Lasers**
J. Reichert, R. Holzwarth, Th. Udem, and T.W. Hänsch, Opt. Commun. 172, 59 (1999).
18. **Effect of the 1999 Solar Eclipse on Atomic Clocks**
Thomas Udem, Jörg Reichert, Ronald Holzwarth, Theodor Hänsch, Rainer Krämer, Jörg Hahn, Jens Hammesfahr, Nature 402, 749 (1999).
19. **Phase Coherent Vacuum-Ultraviolet to Radio Frequency Comparison with a Mode-Locked Laser**
J. Reichert, M. Niering, R. Holzwarth, M. Weitz, Th. Udem, and T.W. Hänsch, Phys. Rev. Lett. 84, 3232 (2000).
20. **Measurement of the Hydrogen 1S–2S Transition Frequency by Phase Coherent Comparison with a Microwave Cesium Fountain Clock**
M. Niering, R. Holzwarth, J. Reichert, P. Pokasov, Th. Udem, M. Weitz, T.W. Hänsch, P. Lemonde, G. Santarelli, M. Abgrall, P. Laurent, C. Salomon, and A. Clairon, Phys. Rev. Lett. 84, 5496 (2000).

21. **Direct Link between Microwave and Optical Frequencies with a 300 THz Femtosecond Laser Comb**
S.A. Diddams, D.J. Jones, J.Ye, S.T. Cundiff, J.L. Hall, J.K. Ranka, R.S. Windeler, R. Holzwarth, Th. Udem, and T.W. Hänsch, Phys. Rev. Lett. 84, 5102 (2000).
22. **Measuring the Frequency of Light with Mode-Locked Lasers**
Thomas Udem, Jörg Reichert, Ronald Holzwarth, Markus Niering, Martin Weitz, and Theodor Hänsch, *Topics in Applied Physics: Advanced Techniques for Frequency Measurement and Control*, A. Luiten ed., Springer Verlag, Berlin, Heidelberg vol. 79, p. 275 (2000).
23. **Controlling the Phase Evolution of Few-Cycle Light Pulses**
A. Apolonski, A. Poppe, G. Tempea, Ch. Spielmann, Th. Udem, R. Holzwarth, T.W. Hänsch, and F. Krausz, Phys. Rev. Lett. 85, 740 (2000).
24. **An Optical Frequency Synthesizer for Precision Spectroscopy**
R. Holzwarth, Th. Udem, T.W. Hänsch, J.C. Knight, W.J. Wadsworth, and P.St.J. Russell, Phys. Rev. Lett. 85, 2264 (2000).
25. **Absolute Optical Frequency Measurement of the Cesium D₂ Line**
Th. Udem, J. Reichert, T.W. Hänsch, and M. Kourogi, Phys. Rev. A 62, 031801 (2000).
26. **Absolute Frequency Measurement of the In⁺ Clock Transition with a Mode-Locked Laser**
J. von Zanthier, Th. Becker, M. Eichenseer, A.Yu. Nevsky, Ch. Schwedes, E. Peik, H. Walther, R. Holzwarth, J. Reichert, Th. Udem, T.W. Hänsch, P. V. Pokasov, M.N. Skvortsov, and S.N. Bagayev, Opt. Lett. 25, 1729 (2000).
27. **A new Type of Frequency Chain and its Application to Optical Frequency Metrology**
R. Holzwarth, J. Reichert, Th. Udem, and T.W. Hänsch, Proceedings of the 3rd International Symposium *Modern Problems of Laser Physics (MPLP00)*, S.N. Bagayev, and V.I. Denisov eds., Novosibirsk p. 83 (2000).
28. **Absolute Optical Frequency Measurement of the In⁺ Clock Transition with a Modelocked-Femtosecond Laser**
J. von Zanthier, Th. Becker, M. Eichenseer, A.Yu. Nevsky, Ch. Schwedes, E. Peik, H. Walther, R. Holzwarth, J. Reichert, Th. Udem, T.W. Hänsch, P.V. Pokasov, M.N. Skvortsov, and S.N. Bagayev, Proceedings of the 3rd International Symposium *Modern Problems of Laser Physics (MPLP00)*, S.N. Bagayev, and V.I. Denisov eds., Novosibirsk p. 111 (2000).
29. **Optical Frequency Metrology and its Contribution to the Determination of Fundamental Constants**
R. Holzwarth, J. Reichert, Th. Udem, and T.W. Hänsch, Proceedings of the XVII International Conference on Atomic Physics (*ICAP00*), E. Arimondo, P. De Natale, and M. Inguscio eds., AIP Conference Proceedings vol. 551, p. 58 (2001).
30. **A Compact Femtosecond-Laser-Based Optical Clockwork**
S.A. Diddams, Th. Udem, K.R. Vogel, C. W. Oates, E.A. Curtis, R.S. Windeler, A. Bartels, J.C. Bergquist, and L. Hollberg, Proceedings of the SPIE, *Laser Frequency Stabilization, Standards, Measurement, and Applications*, J.L. Hall, and J. Ye eds., vol. 4269, p. 77 (2001).

31. **Absolute Frequency Measurements of the Hg⁺ and Ca Optical Clock Transitions with a Femtosecond Laser**
Th. Udem, S.A. Diddams, K.R. Vogel, C.W. Oates, E.A. Curtis, W.D. Lee, W.M. Itano, R.E. Drullinger, J.C. Bergquist, and L. Hollberg, Phys. Rev. Lett. 86, 4996 (2001).
32. **Frequency Comparison and Absolute Frequency Measurement of I₂-Stabilized Lasers at 532 nm**
A.Yu. Nevsky, R. Holzwarth, J. Reichert, Th. Udem, T.W. Hänsch, J. von Zanthier, H. Walther, H. Schnatz, F. Riehle, P.V. Pokasov, M.N. Skvortsov, and S.N. Bagayev, Opt. Commun., 192, 263 (2001).
33. **A New Type of Frequency Chain and its Contribution to Fundamental Frequency Metrology**
Thomas Udem, Jörg Reichert, Ronald Holzwarth, Scott Diddams, David Jones, Jun Ye, Steven Cundiff, Theodor Hänsch, and John Hall, *Lecture Notes in Physics, Precision Physics of Simple Atomic Systems*, S. G. Karshenboim, F. S. Pavone, G. F. Bassani, M. Inguscio, and T. W. Hänsch eds., Springer Verlag, Berlin, Heidelberg vol. 627, p. 125. (2001).
34. **Precision Spectroscopy of Atomic Hydrogen**
F. Biraben, T.W. Hänsch, M. Fischer, M. Niering, R. Holzwarth, J. Reichert, Th. Udem, M. Weitz, B. de Beauvoir, C. Schwob, L. Jozefowski, L. Hilico, F. Nez, L. Julien, O. Acef, J.J. Zondy, and A. Clairon, *Lecture Notes in Physics, Precision Physics of Simple Atomic Systems*, S.G. Karshenboim, F.S. Pavone, G.F. Bassani, M. Inguscio, and T.W. Hänsch eds., Springer Verlag, Berlin, Heidelberg vol. 627, p. 17 (2001).
35. **Frequency Comparison and Absolute Frequency Measurement of I₂-Stabilized Lasers at 532 nm**
A.Yu. Nevsky, R. Holzwarth, J. Reichert, Th. Udem, T.W. Hänsch, J. von Zanthier, H. Walther, H. Schnatz, F. Riehle, P.V. Pokasov, M.N. Skvortsov, and S.N. Bagayev, *Lecture Notes in Physics, Precision Physics of Simple Atomic Systems*, S. G. Karshenboim, F.S. Pavone, G.F. Bassani, M. Inguscio, and T.W. Hänsch eds., Springer Verlag, Berlin, Heidelberg vol. 627, p. 576 (2001).
36. **White-Light Frequency Comb Generation with a Diode-Pumped Cr:LiSAF Laser**
R. Holzwarth, M. Zimmermann, Th. Udem, T.W. Hänsch, P. Russbüldt, K. Gäbel, R. Poprawe, J.C. Knight, W.J. Wagsworth, and P.StJ. Russell, Opt. Lett. 26, 1376 (2001).
37. **An Optical Clock Based on a Single Trapped ¹⁹⁹Hg⁺ Ion**
S.A. Diddams, Th. Udem, J.C. Bergquist, E.A. Curtis, R.E. Drullinger, L. Hollberg, W.M. Itano, W.D. Lee, C.W. Oates, K.R. Vogel, and D.J. Wineland, Science 293, 825 (2001).
38. **All-Optical Atomic Clocks**
R.E. Drullinger, Th. Udem, S.A. Diddams, K.R. Vogel, C.W. Oates, E.A. Curtis, W.D. Lee, W.M. Itano, L. Hollberg, J.C. Bergquist, Proceedings of the 2001 IEEE International Frequency Control Symposium (FCS01), p. 69 (2001).

39. **A New Type of Frequency Chain and its Application to Optical Frequency Metrology**
R. Holzwarth, J. Reichert, Th. Udem, and T.W. Hänsch, *Laser Physics* 11, 1100 (2001).
40. **Absolute Frequency Measurement of the In⁺ Clock Transition with a Mode-Locked Femtosecond Laser**
J. von Zanthier, Th. Becker, M. Eichenseer, A.Yu. Nevytsky, Ch. Schwedes, E. Peik, H. Walther, R. Holzwarth, J. Reichert, Th. Udem, T.W. Hänsch, P.V. Pokasov, M.N. Skvortsov, and S. N. Bagayev, *Laser Physics* 11, 1117 (2001).
41. **Absolute Frequency Measurement of Iodine Lines with a Femtosecond Optical Synthesizer**
R. Holzwarth, A. Yu. Nevytsky, M. Zimmermann, Th. Udem, T.W. Hänsch, J. von Zanthier, H. Walther, J.C. Knight, W.J. Wadsworth, P.St.J. Russell, M.N. Skvortsov, and S.N. Bgayev, *Appl. Phys. B* 73, 269 (2001).
42. **Achievements in Optical Frequency Metrology**
Thomas Udem and Allister I.Ferguson, *Laser Physics at the Limits*, H. Figger, D. Meschede, C. Zimmermann eds., Springer Verlag, Berlin, Heidelberg p. 9 (2001).
43. **Measuring the Frequency of Light with a Femtosecond Laser Frequency Comb**
T.W. Hänsch, R. Holzwarth, J. Reichert, and Th. Udem, Proceedings of the *International School of Physics “Enrico Fermi”*, T.J. Quinn, S. Leschiutta and P. Tavella eds., IOS Press, Amsterdam p. 747 (2001).
44. **Optical Clockworks and the Measurement of Laser Frequencies with a Mode-Locked Frequency Comb**
R. Holzwarth, M. Zimmermann, Th. Udem, and T.W. Hänsch, *IEEE J. of Quant. Electr.* 37, 1493 (2001).
45. **Optical Frequency Standards and Measurements**
L. Hollberg, C.W. Oates, E.A. Curtis, E.N. Ivanov, S.A. Diddams, Th. Udem, H.G. Robinson, J.C. Bergquist, R.J. Rafac, W.M. Itano, R.E. Drullinger, and D.J. Wineland, *IEEE J. of Quant. Electr.* 37, 1502 (2001).
46. **High Resolution Spectroscopy of Atomic Hydrogen**
M. Fischer, M. Niering, R. Holzwarth, J. Reichert, Th. Udem, M. Weitz, and T.W. Hänsch, Proceedings of the XV *International Conference on Spectral Line Shapes (IC-SLS00)*, J. Seidel ed., AIP Conference Proceedings vol. 559, p. 249 (2001).
47. **Measuring the Frequency of Light with Ultrashort Pulses**
T.W. Hänsch, R. Holzwarth, J. Reichert, M. Zimmermann, and Th. Udem, Proceedings of the 15th *European Frequency and Time Forum (EFTF01)*, L. G. Bernier ed., p. 15 (2001).
48. **Precision Optical Frequency Metrology using Pulsed Lasers**
Th. Udem, R. Holzwarth, M. Zimmermann, and T.W. Hänsch, Proceedings of the 7th international symposium on *Foundations of Quantum Mechanics in the Light of New Technology (ISQM01)*, ed. Y. A. Ono, and K. Fujikawa, World Scientific Singapore p. 253 (2002).

49. **Uhrenvergleich auf der Femtosekundenskala**
Thomas Udem, Ronald Holzwarth, Theodor W. Hänsch, Physik Journal p. 39, Februar 2002.
50. **Optical Frequency Metrology**
Th. Udem, R. Holzwarth, and T.W. Hänsch, Nature 416, 233 (2002).
51. **A Mercury-Ion Optical Clock**
J.C. Bergquist, U. Tanaka, R.E. Drullinger, W.M. Itano, D.J. Wineland, S.A. Diddams, L. Hollberg, E.A. Curtis, C.W. Oates, and Th. Udem, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 99 (2002).
52. **Optical Frequency Synthesis with Ultrashort Pulses**
Th. Udem, R. Holzwarth, M. Zimmermann, and T.W. Hänsch, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 125 (2002).
53. **A ^{40}Ca Optical Frequency Standard at 657nm: Frequency Measurements and Future Prospects**
E.A. Curtis, C.W. Oates, S.A. Diddams, K.R. Vogel, L. Hollberg, and Th. Udem, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 331 (2002).
54. **A Femtosecond-Laser-Based Optical Clockwork**
S.A. Diddams, Th. Udem, K.R. Vogel, L.-S. Ma, L. Robertsson, C.W. Oates, E.A. Curtis, W.M. Itano, R.E. Drullinger, D.J. Wineland, J.C. Bergquist, and L. Hollberg, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 419 (2002).
55. **Absolute Frequency Measurements of a Methane-Stabilized Transportable He-Ne Laser at $3.39\ \mu\text{m}$**
P.V. Pokasov, R. Holzwarth, Th. Udem, J. Reichert, M. Niering, M. Zimmermann, M. Weitz, T.W. Hänsch, A.K. Dmitriev, S.N. Bagayev, P. Lemonde, G. Santarelli, P. Laurent, M. Abgrall, A. Clairon, and C. Salomon, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 510 (2002).
56. **Frequency Comparison of I_2 stabilized Lasers at 532 nm and absolute optical Frequency Measurement of the I_2 Absorption Lines**
A. Yu. Nevsky, R. Holzwarth, M. Zimmermann, Th. Udem, T.W. Hänsch, J. von Zanthier, H. Walther, P.V. Pokasov, M.N. Skvortsov, S.N. Bagayev, H. Schnatz, and F. Riehle, Proceedings of the Sixth Symposium on *Frequency Standards and Metrology*, P. Gill ed., World Scientific, Singapore p. 521 (2002).
57. **Ultrafast Mode-locked Lasers for the Measurement of Laser Frequencies and as Optical Clockworks**
Ronald Holzwarth, Thomas Udem, and Theodor W. Hänsch, *ICO International Trends in Applied Optics*, A. H. Guenther ed., SPIE press, Bellingham Washington USA vol. 5, p. 23 (2002).

58. **Measuring the Frequency of Light with Ultra short Pulses**
T.W. Hänsch, R. Holzwarth, M. Zimmermann, and Th. Udem, Proceedings of the XV International Conference on *Laser Spectroscopy (ICOLS)*, S. Chu, V. Vuletić, A. J. Kerman and C. Chin eds., World Scientific Singapore p. 88 (2001).
59. **A Single-Ion Optical Clock**
J. Bergquist, S.A.. Diddams, C. Oates, E. Curtis, L. Hollberg, R. Drullinger, W. Itano, D. Wineland, and Th. Udem, Proceedings of the XV International Conference on *Laser Spectroscopy (ICOLS)*, S. Chu, V. Vuletić, A.J. Kerman and C. Chin eds., World Scientific Singapore p. 106 (2001).
60. **Rabi Flopping sees the Light**
Th. Udem, Nature 420, 469 (2002).
61. **Attosecond Control of Electronic Processes by Intense Light Fields**
A. Baltuška, Th. Udem, M. Uiberacker, M. Hentschel, E. Goulielmakis, Ch. Gohle, R. Holzwarth, V. S. Yakovlev, A. Scrinzi, T.W. Hänsch, and F. Krausz, Nature 421, 611 (2003).
62. **Phase-Stabilized 4-fs Pulses at the full Oscillator Repetition Rate for a Photoemission Experiment**
V.S. Yakovlev, P. Dombi, G. Tempea, C. Lemell, J. Burgdörfer, Th. Udem, and A. Apolonski, Appl. Phys. B 76, 329 (2003).
63. **Phase-controlled Amplification of few-cycle Laser Pulses**
A. Baltuška, M. Uiberacker, E. Goulielmakis, R. Kienberger, V.S. Yakovlev, Th. Udem, T.W. Hänsch, and F. Krausz, IEEE J. Select. Topics Quantum Electron. 9, 972 (2003).
64. **Optical Clockwork with an offset-free Difference-Frequency Comb: Accuracy of Sum- and Difference-Frequency Generation**
M. Zimmermann, Ch. Gohle, R. Holzwarth, Th. Udem, and T.W. Hänsch, Opt. Lett. 29, 310 (2004).
65. **Observation of Light-Phase-Sensitive Photoemission from a Metal**
A. Apolonski, P. Dombi, G.G. Paulus, M. Kakehata, R. Holzwarth, Th. Udem, Ch. Lemell, K. Torizuka, J. Burgdörfer, T.W. Hänsch, and F. Krausz, Phys. Rev. Lett. 92, 073902 (2004).
66. **Direct Measurement and Analysis of the Carrier-Envelope Phase in Light Pulses approaching the Single-Cycle Regime**
P. Dombi, A. Apolonski, Ch. Lemell, G.G. Paulus, M. Kakehata, R. Holzwarth, Th. Udem, K. Torizuka, J. Burgdörfer, T.W. Hänsch, and F. Krausz, New J. of Phys. 6, 39 (2004).
67. **New Limits on the Drift of Fundamental Constants from Laboratory Measurements**
M. Fischer, N. Kolachevsky, M. Zimmermann, R. Holzwarth, Th. Udem, T.W. Hänsch, M. Abgrall, J. Grünert, I. Maksimovic, S. Bize, H. Marion, F. Pereira Dos Santos, P. Lemonde, G. Santarelli, P. Laurent, A. Clairon, C. Salomon, M. Haas, U.D. Jenischura, and C.H. Keitel, Phys. Rev. Lett. 92, 230802 (2004).

- 68. Precision Spectroscopy of Atomic Hydrogen and Variations of Fundamental Constants**
 M. Fischer, N. Kolachevsky, M. Zimmermann, R. Holzwarth, Th. Udem, T.W. Hänsch, M. Abgrall, J. Grünert, I. Maksimovic, S. Bize, H. Marion, F. Pereira Dos Santos, P. Lemonde, G. Santarelli, P. Laurent, A. Clairon, and C. Salomon, *Lecture Notes in Physics: Astrophysics, Clocks and Fundamental Constants*, S.G. Karshenboim and E. Peik eds., Springer Verlag Berlin, Heidelberg vol. 648, p. 209 (2004).
- 69. Optical Frequency-Comb Generation and High-Resolution Laser Spectroscopy**
 Thomas Udem, Ronald Holzwarth, Marcus Zimmermann, Christoph Gohle, and Theodor Hänsch, *Topics in Applied Physics: Few-Cycle Pulse Generation and its Application*, F. X. Kärtner ed., Springer Verlag Berlin, Heidelberg vol. 95, p. 295 (2005).
- 70. Short and Sharp-Spectroscopy with Frequency Combs**
 Thomas Udem, Science 307, 364 (2005).
- 71. Monolithic Carrier-Envelope Phase-Stabilization Scheme**
 T. Fuji, J. Rauschenberger, A. Apolonski, V.S. Yakovlev, G. Tempea, Th. Udem, Ch. Gohle, T.W. Hänsch, W. Lehnert, M. Scherer and F. Krausz, Opt. Lett. 30, 332 (2005).
- 72. Attosecond Control of Optical Waveforms**
 T. Fuji, J. Rauschenberger, Ch. Gohle, A. Apolonski, Th. Udem, V.S. Yakovlev, G. Tempea, T.W. Hänsch, and F. Krausz, New J. of Phys. 7, 116 (2005).
- 73. Light-Insensitive Optical Clock**
 Th. Udem, Nature 435, 291 (2005).
- 74. Atomuhr im optischen Gitter**
 Thomas Udem, Physik Journal p. 19, Juli 2005.
- 75. High-Resolution Laser Spectroscopy and Time Variation of Fundamental Constants**
 M. Zimmermann, M. Fischer, N. Kolachevsky, R. Holzwarth, Th. Udem, T.W. Hänsch, M. Abgrall, J. Grünert, I. Maksimovic, S. Bize, H. Marion, F. Pereira Dos Santos, P. Lemonde, G. Santarelli, P. Laurent, A. Clairon, and C. Salomon, Laser Physics 15, 997 (2005).
- 76. Optical Frequency Measurement**
 Thomas Udem, Marcus Zimmermann, Ronald Holzwarth, Marc Fischer, Nikolai Kolachevsky, and Theodor Hänsch, *Femtosecond Optical Frequency Comb: Principle, Operation and Applications*, J. Ye and S. T. Cundiff eds., Springer Verlag Berlin, Heidelberg, p. 176 (2005).
- 77. A Frequency Comb in the Extreme Ultraviolet**
 Christoph Gohle, Thomas Udem, Maximilian Herrmann, Jens Rauschenberger, Ronald Holzwarth, Hans A. Schuessler, Ferenc Krausz, and Theodor W. Hänsch, Nature 436, 234 (2005).
- 78. Carrier Envelope Phase Noise in Stabilized Amplifier Systems**
 Christoph Gohle, Jens Rauschenberger, Takao Fuji, Thomas Udem, Alexander Apolonski, Ferenc Krausz, Theodor W. Hänsch, Opt. Lett. 30, 2487 (2005)

79. **Precision Spectroscopy of Hydrogen and Femtosecond Frequency Combs**
T.W. Hänsch, J. Alnis, P. Fendel, M. Fischer, C. Gohle, M. Herrmann, R. Holzwarth, N. Kolachevsky, Th. Udem, and M. Zimmermann, Phil. Trans. R. Soc. A 363, 2115 (2005).
80. **Der lange Weg zur optischen Uhr**
Fritz Haake und Thomas Udem, Physik in unserer Zeit, 6, 258 (2005).
81. **Carrier Phase-Stabilized Amplifier System**
J. Rauschenberger, T. Fuji, M. Hentschel, A.J. Verhoef, T. Udem, C. Gohle, T.W. Hänsch, and F. Krausz, Laser Phys. Lett. 3, 37 (2006).
82. **Constant Insights from Recoils**
Thomas Udem, Nature Physics 2, 153 (2006).
83. **Iodine Hyperfine Structure and absolute Frequency Measurements at 565, 576, and 585 nm**
S. Reinhardt, G. Saathoff, S. Karpuk, C. Novotny, G. Huber, M. Zimmermann, R. Holzwarth, Th. Udem, T.W. Hänsch and G. Gwinner, Opt. Commun. 261, 282 (2006).
84. **Two-Photon Excitation Dynamics in Bound Two-Body Coulomb Systems including ac Stark Shift and Ionization**
M. Haas, U.D. Jentschura, C. H. Keitel, N. Kolachevsky, M. Herrmann, P. Fendel, M. Fischer, Th. Udem, R. Holzwarth, T.W. Hänsch, M.O. Scully, and G.S. Agarwal, Phys. Rev. A 73, 052501 (2006).
85. **Complete Characterization of a Broadband High-Finesse Cavity using an Optical Frequency Comb**
Albert Schliesser, Christoph Gohle, Thomas Udem and Theodor W. Hänsch, Opt. Express 14, 5975 (2006).
86. **High Power all Solid State Laser System near 280 nm**
A. Friedenauer, F. Markert, H. Schmitz, L. Petersen, S. Kahra, M. Herrmann, Th. Udem, T.W. Hänsch and T. Schätz, Appl. Phys. B 84, 371 (2006).
87. **Optische Frequenzkämme und der Physiknobelpreis 2005**
M. Zimmermann, Ch. Gohle, P. Fendel, M. Herrmann, K. Predehl, B. Bernhardt, B. Stein, D. Walker, R. Holzwarth, Th. Udem und T.W. Hänsch, Praxis der Naturwissenschaften, Physik in der Schule 55, 38 (2006).
88. **Photoionization Broadening of the 1S–2S Transition in a Beam of Atomic Hydrogen**
N. Kolachevsky, M. Haas, U.D. Jentschura, M. Herrmann, P. Fendel, M. Fischer, R. Holzwarth, Th. Udem, C.H. Keitel, and T.W. Hänsch, Phys. Rev. A 74, 052504 (2006).
89. **Experimental Test of Special Relativity by Laser Spectroscopy**
C. Novotny, B. Bernhardt, G. Ewald, C. Geppert, G. Gwinner, T.W. Hänsch, R. Holzwarth, G. Huber, S. Karpuk, H.J. Kluge, T. Kühl, W. Nörtershäuser, S. Reinhardt, G. Saathoff, D. Schwalm, Th. Udem and A. Wolf, Hyperfine Interactions 57, 171 (2006).
90. **Two-photon Frequency Comb Spectroscopy of the 6s-8s Transition in Cesium**
P. Fendel, S.D. Bergeson, Th. Udem, and T.W. Hänsch, Opt. Lett. 32, 791 (2007).

91. **Absolute Frequency Measurements and Comparisons in Iodine at 735 nm and 772 nm**
S. Reinhardt, B. Bernhardt, C. Geppert, R. Holzwarth, G. Huber, S. Karpuk, N. Miski-Oglu, W. Nörtershäuser, C. Novotny, Th. Udem, Opt. Commun. 274, 354 (2007).
92. **High-Precision Wavelength Calibration of Astronomical Spectrographs with Laser Frequency Combs**
M.T. Murphy, Th. Udem, R. Holzwarth, A. Sizmann, L. Pasquini, C. Araujo-Hauck, H. Dekker, S. D'Odorico, M. Fischer, T.W. Hänsch and A. Manescau, Mon. Not. R. Astron. Soc. 380, 839 (2007).
93. **Frequency Comb Applications and Optical Frequency Standards**
Th. Udem and F. Riehle, Proceedings of the *International School of Physics "Enrico Fermi"*, T.W. Hänsch, S. Leschiutta and A.J. Wallard eds., IOS Press, Amsterdam p. 317 (2007).
94. **Test of Relativistic Time Dilation with fast Optical Atomic Clocks at Different Velocities**
Sascha Reinhardt, Guido Saathoff, Henrik Buhr, Lars A. Carlson, Andreas Wolf, Dirk Schwalm, Sergei Karpuk, Christian Novotny, Gerhard Huber, Marcus Zimmermann, Ronald Holzwarth, Thomas Udem, Theodor W. Hänsch and Gerald Gwinner, Nature Physics 3, 861 (2007).
95. **Frequency Dependence of the Fixed Point in a Fluctuating Frequency Comb**
D.R. Walker, Th. Udem, Ch. Gohle, B. Stein, and T.W. Hänsch, Appl. Phys. B 89, 535 (2007).
96. **Frequency Comb Vernier Spectroscopy for Broadband, High-Resolution, High-Sensitivity Absorption and Dispersion Spectra**
Ch. Gohle, B. Stein, A. Schliesser, Th. Udem, and T.W. Hänsch, Phys. Rev. Lett. 99, 263902 (2007).
97. **Non-Collinear High Harmonic Generation: A promising Outcoupling Method for Cavity-assisted XUV Generation**
A. Ozawa, A. Vernaleken, W. Schneider, I. Gotlibovych, Th. Udem, and T.W. Hänsch, Opt. Express. 16, 6233 (2008).
98. **Frequency Comb Applications and Optical Frequency Standards**
Th. Udem and F. Riehle, Revista del Nuevo Cimento 30, 563 (2007).
99. **Subhertz Linewidth Diode Lasers by Stabilization to vibrationally and thermally compensated Ultralow-Expansion glass Fabry-Prot Cavities**
J. Alnis, A. Matveev, N. Kolachevsky, Th. Udem, and T.W. Hänsch, Phys. Rev. A 77, 053809 (2008).
100. **High Harmonic Frequency Combs for High Resolution Spectroscopy**
A. Ozawa, J. Rauschenberger, Ch. Gohle, M. Herrmann, D.R. Walker, V. Pervak, A. Fernandez, R. Graf, A. Apolonski, R. Holzwarth, F. Krausz, T.W. Hänsch, and Th. Udem, Phys. Rev. Lett. 100, 253901 (2008).
101. **Laser Frequency Combs for Astronomical Observations**
Tilo Steinmetz, Tobias Wilken, Constanza Araujo-Hauck, Ronald Holzwarth, Theodor W. Hänsch, Luca Pasquini, Antonio Manescau, Sandro D'Odorico, Michael T. Murphy, Thomas Kentischer, Wolfgang Schmidt, and Thomas Udem, Science 321, 1335 (2008).

102. **Frequency Metrology on Single Trapped Ions in the Weak Binding Limit: The $3s_{1/2} - 3p_{3/2}$ Transition in $^{24}\text{Mg}^+$**
 M. Herrmann, V. Batteiger, S. Knünz, G. Saathoff, Th. Udem, and T.W. Hänsch, Phys. Rev. Lett. 102, 013006 (2009).
103. **Frequency Comb Benefits**
 Th. Udem, Nature Photonics 3, 82 (2009).
104. **A deep-UV Optical Frequency Comb at 205 nm**
 E. Peters, S.A. Diddams, P. Fendel, S. Reinhardt, T.W. Hänsch, and Th. Udem, Opt. Express 17, 9183 (2009).
105. **Feasibility of Coherent XUV Spectroscopy on the 1S–2S Transition in Singly Ionized Helium**
 M. Herrmann, M. Haas, U.D. Jentschura, F. Kottmann, D. Leibfried, G. Saathoff, C. Gohle, A. Ozawa, V. Batteiger, S. Knünz, N. Kolachevsky, H.A. Schüssler, T.W. Hänsch, and Th. Udem, Phys. Rev. A. 79, 052505 (2009).
106. **FabryPérot Filter Cavities for Wide-Spaced Frequency Combs with Large Spectral Bandwidth**
 T. Steinmetz, T. Wilken, C. Araujo-Hauck, R. Holzwarth, T.W. Hänsch and Th. Udem, Appl. Phys B 69, 251 (2009).
107. **Femtosecond Optical Frequency Combs**
 Th. Udem, R. Holzwarth, Th. Hänsch, Eur. Phys. J. Special Topics 172, 69 (2009).
108. **Precision Spectroscopy of the $3s - 3p$ Fine-Structure Doublet in Mg^+**
 V. Batteiger, S. Knünz, M. Herrmann, G. Saathoff, H.A. Schüssler, B. Bernhardt, T. Wilken, R. Holzwarth, T.W. Hänsch, and Th. Udem, Phys. Rev. A 80, 022503 (2009).
109. **High Resolution Wavelength Calibration: Advancements with the Laser Frequency Comb Development**
 A. Manescau, C. Araujo-Hauck, L. Pasquini, M.T. Murphy, Th. Udem, T.W. Hänsch, R. Holzwarth, A. Sizmann, H. Dekker and S. D'Odorico, *Science with the VLT in the ELT Era*, A. Moorwood ed., Springer, Amsterdam p. 411 (2009).
110. **Phase-Stable Single-Pass Cryogenic Amplifier for High Repetition Rate Few-Cycle Laser Pulses**
 Akira Ozawa, Waldemar Schneider, Theodor W Hänsch, Thomas Udem and Peter Hommelhoff, New J. Phys. 11, 083029 (2009).
111. **A Phonon Laser**
 K. Vahala, M. Herrmann, S. Knünz, V. Batteiger, G. Saathoff, T.W. Hänsch and Th. Udem, Nature Physics 5, 682 (2009).
112. **Phase-Coherent Frequency Comparison of Optical Clocks Using a Telecommunication Fiber Link**
 Harald Schnatz, Osama Terra, Katharina Predehl, Thorsten Feldmann, Thomas Legero, Burghard Lipphardt, Uwe Sterr, Gesine Grosche, Ronald Holzwarth, Theodor W. Hänsch, Thomas Udem, Zehuang H. Lu, Li J. Wang, Wolfgang Ertmer, Jan Fribe, Andr Pape, Ernst-M. Rasel, Mathias Riedmann, and Temmo Wbbena, IEEE Trans. Ultrasonics Ferroelectr. Freq. Control, 57, 175 (2009).

113. **Testing the Stability of the Fine Structure Constant in the Laboratory**
 N. Kolachevsky, A. Matveev, J. Alnis, C.G. Parthey, T. Steinmetz, T. Wilken, R. Holzwarth, Th. Udem, and T.W. Hänsch, *Space Science Reviews* 148, 267 (2009).
114. **Cavity-Enhanced Dual-Comb Spectroscopy**
 Birgitta Bernhardt, Akira Ozawa, Patrick Jacquet, Marion Jacquay, Yohei Kobayashi, Thomas Udem, Ronald Holzwarth, Guy Guelachvili, Theodor W. Hänsch and Nathalie Picqué, *Nature Photonics* 4, 55 (2010).
115. **Ultraviolet Enhancement Cavity for Ultrafast nonlinear Optics and high-rate Multiphoton Entanglement Experiments**
 Roland Krischek, Witlef Wieczorek, Akira Ozawa, Nikolai Kiesel, Patrick Michelberger, Thomas Udem and Harald Weinfurter, *Nature Photonics* 4, 170 (2010).
116. **Two-Photon direct Frequency Comb Spectroscopy with chirped Pulses**
 S. Reinhardt, E. Peters, T.W. Hänsch, and Th. Udem, *Phys. Rev. A* 81, 033427 (2010).
117. **Precision Measurement of the Hydrogen-Deuterium 1S–2S Isotope Shift**
 C.G. Parthey, A. Matveev, J. Alnis, R. Pohl, Th. Udem, U.D. Jentschura, N. Kolachevsky, and T.W. Hänsch, *Phys. Rev. Lett.* 104, 233001 (2010).
118. **A Peltier Cooled Single Pass Amplifier for Titanium:Sapphire Laser Pulses**
 A. Ozawa, W. Schneider, F. Najafi, T.W. Hänsch, Th. Udem, and P. Hommelhoff, *Las. Phys.* 20 967 (2010).
119. **Power Scaling of a High-Repetition-Rate enhancement Cavity**
 I. Pupeza, T. Eidam, J. Rauschenberger, B. Bernhardt, A. Ozawa, E. Fill, A. Apolonski, Th. Udem, J. Limpert, Z.A. Alahmed, A.M. Azzeer, A. Tünnermann, T.W. Hänsch, and F. Krausz, *Opt. Lett.* 35, 2052 (2010).
120. **High-Precision Calibration of Spectrographs**
 T. Wilken, C. Lovis, A. Manescau, T. Steinmetz, L. Pasquini, G. Lo Curto, T.W. Hänsch, R. Holzwarth, Th. Udem, *Mon. Not. R. Astron. Soc. Lett.* 405, L16 (2010).
121. **Modeling and Optimization of Single-Pass Laser Amplifiers for high-Repetition-Rate Laser Pulses**
 A. Ozawa, Th. Udem, U.D. Zeitner, T.W. Hänsch, and P. Hommelhoff, *Phys. Rev. A* 82, 82, 033815 (2010).
122. **Injection Locking of a Trapped-Ion Phonon Laser**
 S. Knünz, M. Herrmann, V. Batteiger, G. Saathoff, T.W. Hänsch, K. Vahala, and Th. Udem, *Phys. Rev. Lett.* 105, 013004 (2010).
123. **Highly sensitive Dispersion Measurement of a high-power passive optical Resonator using Spatial-Spectral Interferometry**
 I. Pupeza, X. Gu, E. Fill, T. Eidam, J. Limpert, A. Tünnermann, F. Krausz, and Th. Udem, *Opt. Express* 18, pp. 26184 (2010).
124. **Hydrogen-Deuterium Isotope Shift: From the 1S–2S-Transition Frequency to the Proton-Deuteron Charge-Radius Difference**
 U.D. Jentschura, A. Matveev, C.G. Parthey, J. Alnis, R. Pohl, Th. Udem, N. Kolachevsky, and T.W. Hänsch, *Phys. Rev.* 83, 042505 (2011).

125. **14 GHz visible Supercontinuum Generation: Calibration Sources for Astronomical Spectrographs**
 S.P. Stark, T. Steinmetz, R.A. Probst, H. Hundertmark, T. Wilken, T.W. Hänsch, Th. Udem, P.St.J. Russell, and R. Holzwarth, Opt. Express 19, 15690 (2011).
126. **Single-Pass High-Harmonic Generation at 20.8 MHz Repetition Rate**
 A. Vernaleken, J. Weitenberg, Th. Sartorius, P. Russbueldt, W. Schneider, S.L. Stebbings, M.F. Kling, P. Hommelhoff, H.D. Hoffmann, R. Poprawe, F. Krausz, T.W. Hänsch, and Th. Udem, Opt. Lett. 36, 3428 (2011).
127. **Improved Measurement of the Hydrogen 1S-2S Transition Frequency**
 Christian G. Parthey, Arthur Matveev, Janis Alnis, Birgitta Bernhardt, Axel Beyer, Ronald Holzwarth, Aliaksei Maistrou, Randolph Pohl, Katharina Predehl, Thomas Udem, Tobias Wilken, Nikolai Kolachevsky, Michel Abgrall, Daniele Rovera, Christophe Salomon, Philippe Laurent, and Theodor W. Hänsch, Phys. Rev. Lett. 107, 203001 (2011).
128. **Comment on: "Lorentz violation in high-energy ions" by Santosh Devasia**
 G. Saathoff, S. Reinhardt, R. Holzwarth, T.W. Hänsch, Th. Udem, D. Bing, D. Schwalm, A. Wolf, S. Karpuk, G. Huber, C. Novotny, B. Botermann, C. Geppert, W. Nörterhäuser, T. Kühl, T. Stöhlker, and G. Gwinner, Eur. Phys. J. C 71, 1596 (2011).
129. **Vacuum ultraviolet Frequency Combs generated by a femtosecond enhancement Cavity in the Visible**
 Birgitta Bernhardt, Akira Ozawa, Andreas Vernaleken, Ioachim Pupeza, Jan Kaster, Yohei Kobayashi, Ronald Holzwarth, Ernst Fill, Ferenc Krausz, Theodor W. Hänsch, and Thomas Udem, Opt. Lett. 37, 503 (2012).
130. **Sub-millikelvin spatial Thermometry of a single Doppler-cooled Ion in a Paul Trap**
 S. Knünz, M. Herrmann, V. Batteiger, G. Saathoff, T.W. Hänsch, and Th. Udem, Phys. Rev. A 85, 023427 (2012).
131. **A 920-Kilometer Optical Fiber Link for Frequency Metrology at the 19th Decimal Place**
 K. Predehl, G. Grosche, S.M.F. Raupach, S. Droste, O. Terra, J. Alnis, Th. Legero, T.W. Hänsch, Th. Udem, R. Holzwarth, H. Schnatz, Science 336, 441 (2012).
132. **A Spectrograph for Exoplanet Observations Calibrated at the centimetre-per-second Level**
 Tobias Wilken, Gaspare Lo Curto, Rafael A. Probst, Tilo Steinmetz, Antonio Manescau, Luca Pasquini, Jonay I. González Hernández, Rafael Rebolo, Theodor W. Hänsch, Thomas Udem, and Ronald Holzwarth, Nature 485, 611 (2012).
133. **Durchkämmte Spektren**
 Thomas Udem, Physik Journal p. 45, Juli 2012.
134. **Astronomical Spectrograph Calibration at the Exo-Earth Detection Limit**
 Gaspare Lo Curto, Luca Pasquini, Antonio Manescau, Ronald Holzwarth, Tilo Steinmetz, Tobias Wilken, Rafael Probst, Thomas Udem, Theodor W. Hänsch, Jonay González, Hernández, Massimiliano Esposito, Rafael Rebolo, Bruno Canto Martins, and Jose Renan de Medeiros, The Messenger 149 September 2012, p. 2

135. **Real-Time Dual Frequency Comb Spectroscopy in the Near Infrared**
F. Zhu, T. Mohamed, J. Strohaber, A.A. Kolomenskii, Th. Udem, and H.A. Schuessler, Appl. Phys. Lett. 102, 121116 (2013).
136. **Nonlinear Amplification of Side-Modes in Frequency Combs**
R.A. Probst, T. Steinmetz, T. Wilken, H. Hundertmark, S.P. Stark, G.K.L. Wong, P.St.J. Russell, T.W. Hänsch, R. Holzwarth, and Th. Udem, Opt. Expr. 21, 11670 (2013).
137. **Nonlinear Amplification of Side-Modes in Frequency Combs**
R.A. Probst, T. Steinmetz, T. Wilken, H. Hundertmark, S.P. Stark, G.K.L. Wong, P.St.J. Russell, T.W. Hänsch, R. Holzwarth, and Th. Udem, Opt. Expr. 21, 11670 (2013).
138. **Laserlineal für den Kosmos**
Rafael A. Probst, Tobias Wilken, Tilo Steinmetz, Thomas Udem, Physik in unserer Zeit, 44, 128 (2013).
139. **Precision Measurement of the Hydrogen 1S-2S Frequency via a 920-km Fiber Link**
Arthur Matveev, Christian G. Parthey, Katharina Predehl, Janis Alnis, Axel Beyer, Ronald Holzwarth, Thomas Udem, Tobias Wilken, Nikolai Kolachevsky, Michel Abgrall, Daniele Rovera, Christophe Salomon, Philippe Laurent, Gesine Grosche, Osama Terra, Thomas Legero, Harald Schnatz, Stefan Weyers, Brett Altschul, and Theodor W. Hänsch, Phys. Rev. Lett. 110, 230801 (2013).
140. **Frequency-Comb Spectroscopy of the Hydrogen 1S-3S and 1S-3D Transitions**
Elisabeth Peters, Dylan C. Yost, Arthur Matveev, Theodor W. Hänsch, and Thomas Udem, Ann. Phys. (Berlin) 525, L29 (2013).
141. **Precision Spectroscopy of the 2S-4P Transition in atomic Hydrogen on a cryogenic Beam of optically Excited 2S Atoms**
Axel Beyer, Janis Alnis, Ksenia Khabarova, Arthur Matveev, Christian G. Parthey, Dylan C. Yost, Randolph Pohl, Thomas Udem, Theodor W. Hänsch, and Nikolai Kolachevsky, Ann. Phys. (Berlin) 525, 671 (2013).
142. **Compact High-Repetition-Rate Source of Coherent 100 eV Radiation**
I. Pupeza, S. Holzberger, T. Eidam, H. Carstens, D. Esser, J. Weitenberg, P. Rufibüldt, J. Rauschenberger, J. Limpert, Th. Udem, A. Tünnermann, T.W. Hänsch, A. Apolonski, F. Krausz and E. Fill, Nat. Phot. 7, 608 (2013).
143. **A Frequency Comb calibrated Solar Atlas**
P. Molaro, M. Esposito, S. Monai, G. Lo Curto, J.I. González Hernández, T.W. Hänsch, R. Holzwarth, A. Manescau, L. Pasquini, R.A. Probst, R. Rebolo, T. Steinmetz, Th. Udem, and T. Wilken, Astr. & Astrophys. 560, A61 (2013).
144. **Precision Spectroscopy of Atomic Hydrogen**
A. Beyer, Ch.G. Parthey, N. Kolachevsky, J. Alnis, K. Khabarova, R. Pohl, E. Peters, D.C. Yost, A. Matveev, K. Predehl, S. Droste, T. Wilken, R. Holzwarth, T.W. Hänsch, M. Abgrall, D. Rovera, Ch. Salomon, Ph. Laurent and Th. Udem, J. of Phys.: Conference Series 467 012003 (2013).

145. **Quantum Interference in Two-Photon Frequency-Comb Spectroscopy**

D.C. Yost, A. Matveev, E. Peters, A. Beyer, T.W. Hänsch, and Th. Udem, Phys. Rev. A 90, 012512 (2014).