

Publications dans des revues à comité de lecture
Papers in refereed journals

1. A. Clairon, A. Van Lerberghe, C. Salomon, M. Ouhayoun, C.J. Bordé, *Optics Comm.*, **35** (1980) p.3: *Towards a new absolute frequency reference grid in the 28 THz range.*
2. J. Bordé, C.J. Bordé, C. Salomon, A. Van Lerberghe, M. Ouhayoun, C.D. Cantrell, *Phys. Rev. Lett.*, **45** (1980) p.14: *Breakdown of the point-group symmetry of vibration-rotation states and optical observation of ground-state octahedral splittings of SF₆ using saturation spectroscopy.*
3. C.J. Bordé, S. Avrillier, A. Van Lerberghe, C. Salomon, C. Bréant, D. Bassi, G. Scoles, *Appl. Phys. B*, **28** (1982) p.82: *Observation of optical Ramsey fringes in the 10 m spectral region using a supersonic beam of SF₆.*
4. C. Salomon, C. Bréant, A. Van Lerberghe, G. CAMY, C.J. Bordé, *Appl. Phys. B*, **29** (1982) p.153: *A phase-locked waveguide CO₂ laser for broadband saturation spectroscopy with kilohertz resolution and absolute frequency accuracy. First observation of superhyperfine structures in the ν_3 band of SF₆*
5. C. Salomon, C. Chardonnet, A. Van Lerberghe, C. Bréant, C.J. Bordé, *J. Phys. Lettres (Paris)*, **45** (1984) p.L-1125: *Première observation de la structure hyperfine magnétique dans le spectre infrarouge de l'ammoniac*
6. C.J. Bordé, C. Salomon, S. Avrillier, A. Van Lerberghe, C. Bréant, D. Bassi, G. Scoles, *Phys. Rev. A*, **30** (1984) p.1836: *Optical Ramsey fringes with traveling waves*
7. J.L. Hall, M. Zhu, C. Salomon, *J.O.S.A. A*, **13** (1986): *Measurement of axial velocity distribution of laser cooled atomic beam*
8. A. Aspect, J. Dalibard, A. Heidmann, C. Salomon, C. Cohen-Tannoudji, *Phys. Rev. Lett.*, **57** (1986) p.1688: *Cooling atoms with stimulated emission*
9. C. Salomon, J. Dalibard, A. Aspect, H. Metcalf, C. Cohen-Tannoudji, *Phys. Rev. Lett.*, **59** (1987) p.1659: *Channeling atoms in a laser standing wave*
10. C. Salomon, J. Dalibard, *C.R. Acad. Sci.*, **306** (1988) p.1319: *La température limite d'un jet atomique de césium ralenti par diode laser*
11. C. Salomon, D. Hils, J.L. Hall, *J.O.S.A. B*, **5** (1988) p.1576: *Laser stabilization at the millihertz level*
12. C. Salomon, J. Dalibard, W. Phillips, A. Clairon, S. Guellati, *Europhys. Lett.*, **12** (1990) p.683-688: *Laser cooling of cesium atoms below 3 microKelvin*
13. D. Grison, B. Lounis, C. Salomon, J.-Y. Courtois, G. Grynberg, *Europhys. Lett.*, **15** (1991) p.149-154: *Raman spectroscopy of Cesium atoms in a laser trap*
14. A. Clairon, C. Salomon, S. Guellati, W. Phillips, *Europhys. Lett.*, **16** (1991) p.165-170: *Ramsey resonance in a Zacharias fountain*
15. N. Vansteenkiste, C. Gerz, R. Kaiser, L. Hollberg, C. Salomon, A. Aspect, *J. Phys. (Paris)*, (1991): *A frequency stabilized LNA laser at 1.083 μm : application to the manipulation of helium-4 atoms*
16. V.S. Bagnato, C. Salomon, E. Marega, JR., S.C. Zilio, *J.O.S.A. B*, **8** (1991) p.497: *Influence of adiabatic following and optical pumping in the production of an intense steady flux of slow atoms*

17. O. Emile, F. Bardou, C. Salomon, P. Laurent, A. Nadir, A. Clairon, *Europhys. Lett.*, **20** (1992) p.687-691: *Observation of a new magneto-optical trap*
18. P. Verkerk, B. Lounis, C. Salomon, C. Cohen-Tannoudji, J.Y. Courtois, G. Grynberg, *Phys. Rev. Lett.*, **68** (1992) p.3861-3864: *Dynamics and spatial order of cold cesium atoms in a periodic optical potential*
19. B. Lounis, J.Y. Courtois, P. Verkerk, C. Salomon, G. Grynberg, *Phys. Rev. Lett.*, **69** (1992) p.3029-3032: *Measurement of the friction coefficient in 1D Corkscrew Optical Molasses by Stimulated Rayleigh Spectroscopy*
20. B. Lounis, J. Reichel, C. Salomon, *C.R. Acad. Sci.*, **316** (1993) p.739-744: *Laser cooling of atoms in micro-gravity*
21. B. Lounis, P. Verkerk, J.Y. Courtois, C. Salomon, G. Grynberg, *Europhys. Lett.*, **21** (1993) p.13-17: *Quantized atomic motion in 1D Cesium molasses with magnetic field*
22. B. Lounis, P. Verkerk, C. Salomon, J.Y. Courtois, G. Grynberg, *Non linear Optics*, **5** (1993) p.459-467: *Optical phase-conjugation in Caesium optical molasses*
23. G. Grynberg, B. Lounis, P. Verkerk, J.Y. Courtois, C. Salomon, *Phys. Rev. Lett.*, **70** (1993) p.2249-2252: *Quantized motion of cold cesium atoms in two and three dimensional optical potentials*
24. M. Drewsen, P. Laurent, A. Nadir, G. Santarelli, A. Clairon, Y. Castin, D. Grison, C. Salomon, *Appl. Phys. B*, **59** (1994) p.283-298: *Investigation of sub-Doppler cooling effects in a cesium magneto-optical trap*
25. P. Verkerk, D.R. Meacher, A.B. Coates, J.Y. Courtois, S. Guibal, B. Lounis, C. Salomon, G. Grynberg, *Europhys. Lett.*, **26** (1994) p.171-176: *Designing optical lattices: an investigation with cesium atoms*
26. Ph. Bouyer, P. Lemonde, M. Ben Dahan, A. Michaud, C. Salomon, J. Dalibard, *Europhys. Lett.*, **27** (1994) p.569-574: *An Atom Trap Relying on Optical Pumping*
27. J. Reichel, O. Morice, G.M. Tino, C. Salomon, *Europhys. Lett.*, **28** (1994) p.477-482: *Subrecoil Raman cooling of cesium atoms*
28. D.R. Meacher, D. Boiron, H. Metcalf, C. Salomon, G. Grynberg, *Phys. Rev. A*, **50** (1994) p.R1992-1995: *Method for velocimetry of cold atoms* .
29. S. Lea, A. Clairon, C. Salomon, P. Laurent, B. Lounis, J. Reichel, A. Nadir, G. Santarelli, *Physica Scripta*, **T51** (1994) p.78-84: *Laser Cooling and Trapping of Atoms: New Tools for Ultra-Stable Caesium Clocks*
30. P. Lemonde, O. Morice, E. Peik, J. Reichel, H. Perrin, W. Hansel, C. Salomon, *Europhys. Lett.*, **32** (1995) p.555-560: *An opto-electric trap for cold atoms* .
31. G. Grynberg, D. Boiron, J.Y. Courtois, B. Lounis, D.R. Meacher, C. Salomon, P. Verkerk, *Nonlinear Optics*, **12** (1995) p.353-359: *Four-wave mixing and bragg scattering in two and three-dimensional optical lattices* .
32. J. Reichel, F. Bardou, M. Ben Dahan, E. Peik, S. Rand, C. Salomon, C. Cohen-Tannoudji, *Phys. Rev. Lett.*, **75** (1995) p.4575-4578: *Raman cooling of cesium below 3nK : new approach inspired by Lévy flight statistics* .
33. D. Boiron, A. Michaud, P. Lemonde, Y. Castin, C. Salomon, S. Weyers, K. Szymaniec, L. Cagnet, A. Clairon, *Phys. Rev. A, Rapid Comm.* **53** (1996) p.3734-3737: *Laser cooling of cesium atoms in gray optical molasses down to 1.1 μ K* .

34. M. Ben Dahan, E. Peik, J. Reichel, Y. Castin, C. Salomon, Phys. Rev. Lett., **76** (1996) p.4508-4511: *Bloch Oscillations of Atoms in a Optical Potential*
35. E. Peik, M. Ben Dahan, I. Bouchoule, Y. Castin, C. Salomon, Phys. Rev. A, **55**, 2989 (1997) : *Bloch Oscillations of Atoms, Rapid adiabatic passage and monokinetic atomic beams*
36. J. Söding, R. Grimm, Y. Ovchinnikov, Ph. Bouyer, C. Salomon, Phys. Rev. Lett., **78**, 1420 (1997): *Short-Distance Atomic beam Deceleration with a stimulated light force.*
37. Kuhn, H. Perrin, W. HänseL, C. Salomon, OSA TOPS on ultracold atoms and BEC, **7**, 58, (1997): *Three Dimensional Raman Cooling using Velocity Selective Rapid Adiabatic Passage*
38. M. Raizen, C. Salomon, and Niu Quian, Physics Today, July 1997, p. 30, *New light on quantum transport*
39. M. Ben Dahan, E. Peik, I. Bouchoule, Y. Castin, C. Salomon, Annales de Physique, (1997) *Quantum transport with cold atoms: Bloch oscillations in an optical potential*
40. E. Peik, M. Ben Dahan, I. Bouchoule, Y. Castin, C. Salomon, Appl. Phys. B., **65**, 685, (1997) *Bloch oscillations and an accelerator for atoms*
41. E. Simon, P. Laurent, G. Santarelli, A. Clairon, P. Lemonde, C. Salomon, N. Dimarcq, P. Petit, C. Audoin, F. Gonzalez and F. Jamin-Changeart, Acta Astronautica, n°**12**, 837 (1997) *The PHARAO project: towards a space clock using cold cesium atoms.*
42. D. Boiron, A. Michaud, J.M. Fournier, L. Simard, M. Sprenger, G. Grynberg, and C. Salomon, Phys. Rev. A, **57**, R4106 (1998) *Cold and dense cesium clouds in far detuned dipole traps*
43. P. Laurent, P. Lemonde, E. Simon, G. Santarelli, A. Clairon, P. Petit, N. Dimarcq, C. Audoin, C. Salomon European Physical Journal. D, **3**, 201 (1998). *A cold atom clock in absence of gravity*
44. P. Laurent, P. Lemonde, E. Simon, G. Santarelli, P. Petit, N. Dimarcq, A. Clairon, C. Salomon, C. Audoin, F. Jamin-Changeart, F. Gonzalez, Bulletin du Bureau National de Métrologie, n° **109**, p. 11 (1997): *Un prototype spatial d'horloge utilisant des atomes refroidis par laser*
45. Spallicci, A. Brillet, G. Busca, , G. Castatini, I. Pinto, I. Roxburgh, C. Salomon, M. Soffel, C. Veillet, Class. Quantum Grav., **14**, 2971 (1997). *Experiments in fundamental physics on the space station*
46. H. Perrin, A. Kuhn, I. Bouchoule, C. Salomon, Europhys. Lett., **42**, 395 (1998) *Sideband cooling of neutral atoms in a far -detuned optical lattice*
47. G. Santarelli, P. Laurent, A. Clairon, A. Mann, S. Chang, A. Luiten, C. Salomon, Phys. Rev. Lett., **82**, 4619 (1999) *Quantum Projection Noise in an Atomic Fountain : A High Stability Cesium Frequency Standard*
48. S. Bize, Y. Sortais, M. Santos, C. Mandache, A. Clairon, C. Salomon, Europhys. Lett., **45**, 558 (1999) *A high accuray measurement of the ⁸⁷Rb hyperfine splitting in an atomic fountain*
49. H. Perrin, I. Bouchoule, A. Kuhn, T. Pfau, C. Salomon, Europhys. Lett., **46**, 141 (1999): *Raman cooling of spin polarized cesium atoms in a crossed dipole trap .*

50. I. Bouchoule, H. Perrin, A. Kuhn, M. Morinaga, C. Salomon, Phys. Rev. A, Rapid Comm. **59**, R8 (1999): *Neutral atoms prepared in Fock states of a one dimensional harmonic potential* .
51. M. Morinaga, I. Bouchoule, J.C. Karam, C. Salomon, Phys. rev. Lett. **83**, 4037, (1999): *Manipulation of motional quantum states of neutral atoms*
52. G. Ferrari, M.O. Mewes, F. Schreck, C. Salomon, Optics Letters, **24**, 151 (1999): *High-power multiple-frequency narrow-linewidth laser source based on a semi-conductor tapered amplifier.*
53. D. Boiron, C. Mennerat-Robilliard, J.M. Fournier, L. Guidoni, C. Salomon, G. Grynberg, Euro. Phys. Journ. D, **7**, 373 (1999): *Trapping and cooling cesium atoms in a speckle field*
54. P. Lemonde, P. Laurent, E. Simon, G. Santarelli, A. Clairon, C. Salomon, N. Dimarcq, P. Petit, IEEE Trans. Inst. Meas., **48**, 512 (1999): *Test of a cold atom clock prototype in absence of gravity*
55. M. Dahan, C. Salomon, Pour la Science, **261**, 84, (1999) *Les oscillations de Bloch*
56. M.O. Mewes, G. Ferrari, F. Schreck, A. Sinatra, and C. Salomon, Phys Rev. A, Rapid Comm. **61**, 011403R, (1999) : *Simultaneous magneto-optical trapping of two lithium isotopes*
57. S. Bize, Y. Sortais, P. Lemonde, S. Zhang, P. Laurent, G. Santarelli, C. Salomon, A. Clairon, IEEE Trans. on Ultr., Ferr. and Freq. Contr., **47**, 1253, (2000) *Interrogation Oscillator Noise Rejection in the Comparison of Atomic Fountains*
58. Y. Sortais, S. Bize, Nicolas C., G. Santarelli, C. Salomon, A. Clairon, IEEE Trans. on Ultr., Ferr. and Freq. Contr., **47**, 1093,(2000) *⁸⁷Rb versus ¹³³Cs in cold atom fountains: a comparison*
59. P. Uhrich, P. Guillemot, P. Aubry, F. Gonzalez, C. Salomon, IEEE Trans. on Ultr., Ferr. and Freq. Contr., **47**, 1134, (2000) *ACES microwave link requirements*
60. M. Niering, R. Holzwarth, J. Reichert, P. Pokasov, T. Udem, M. Weitz, T.Hänsch, P. Lemonde, G. Santarelli, M. Abgrall, P. Laurent, C. Salomon, A. Clairon, Phys. Rev. Lett. **84**, 5496 (2000) *Measurement of the 1S-2S Transition Frequency by Phase Coherent Comparison with a Microwave Cesium fountain Clock*
61. Y. Sortais, S. Bize, C. Nicolas, A. Clairon, C. Salomon, C. Williams, Phys. Rev. Lett. **85**, 3117 (2000) *Cold collision frequency shifts in a ⁸⁷Rb atomic fountain*
62. F. Schreck, G. Ferrari, K. Corwin, L. Khaykovich, M.O. Mewes, C. Salomon, Phys. Rev. A, **64**, 011402R (2001) *Sympathetic cooling of bosonic and fermionic lithium gases towards quantum degeneracy*
63. S. Bize, Y. Sortais, C. Mandache, A. Clairon, C. Salomon, IEEE trans. on Instr. and Measur., **50** , 503, (2001) *Cavity Frequency Pulling in Cold Atom Fountains.*
64. L. Blanchet , C. Salomon, P. Teyssandier, P. Wolf, Astronomy and Astrophysics, **370**, 320 (2001) *Relativistic theory for time and frequency transfer to order c^{-3}*
65. Y. Sortais, S. Bize, M. Abgrall, S. Zhang, C. Nicolas, C. Mandache, P. Lemonde, P. Laurent, G. Santarelli, N. Dimarcq, P. Petit, A. Clairon, A. Mann, A. Luiten, S. Chang, and C. Salomon, Physica Scripta , **95**, 50 (2001) *Cold Atom Clocks.*

66. F. Schreck, L. Khaykovich, K. Corwin, G. Ferrari, T. Bourdel, J. Cubizolles, C. Salomon, , Phys. Rev. Lett., **87**, 080403 (2001) *Quasipure Bose-Einstein Condensate Immersed in a Fermi Sea*
67. C. Salomon, N. Dimarcq, M. Abgrall, A. Clairon, P. Laurent, P. Lemonde, G. Santarelli, P. Urich, L.G. Bernier, G. Busca, A. Jornod, P. Thomann, E. Samain, P. Wolf, F. Gonzalez, P. guillemot , S. Leon, F. Nouel, C. Sirmain, S. Feltham, C. R. Acad.Sci. Paris, T.2, **Série 4**, 1313 (2001) *Cold Atoms in space and atomic clocks: ACES*
68. I. Bouchoule, M. Morinaga, C. Salomon, D. Petrov, , Phys. Rev. A, **65**, 033402 (2002). quant-phys/0106032. *A cesium gas strongly confined in one dimension: sideband cooling and collisional properties*
69. L. Khaykovich, F. Schreck, G. Ferrari, T. Bourdel, J. Cubizolles, L. Carr, Y. Castin, C. Salomon, Science 296, 1290 (2002) *Formation of a Matter-Wave Bright Soliton.*
70. F. Pereira dos Santos, H. Marion, S. Bize, Y. Sortais, A. Clairon, C. Salomon, Phys. Rev. Lett. **89**, 233004 (2002) *Controlling the cold collision shift in high precision atomic interferometry*
71. H. Marion, F. Pereira dos Santos, M. Abgrall, S. Zhang, Y. Sortais, S. Bize, Y. Maksimovic, D. Calonico, J. Gruenert, C. Mandache, P. Lemonde, G. Santarelli, P. Laurent, A. Clairon, C. Salomon, Phys. Rev. Lett. **90**, 150801 (2003) *Search for variations of fundamental constants using atomic fountain clocks*
72. L. Khaykovich, F. Schreck, J. Cubizolles, T. Bourdel, K. Corwin, G. Ferrari, C. Salomon Physica B-Condensed Matter 329, (2003) *A Bose-Einstein condensate immersed in a Fermi sea: observation of ultra-cold mixture of Bose and Fermi gases*
73. T. Bourdel, J. Cubizolles, L. Khaykovich, K. Magalhaes, S. Kokkelmans, G. Shlyapnikov, C. Salomon, Phys. Rev. Lett. **91**, 020402 (2003), arXiv: Cond-mat/0303079, *Measurement of interaction energy near a Feshbach resonance in a Lithium 6 Fermi gas.*
74. J. Cubizolles, T. Bourdel, S.J.J.M.F. Kokkelmans, G.V. Shlyapnikov, C. Salomon, Phys. Rev. Lett.**91**, 240401, (2003) arXiv: cond-mat/0308018, *Production of Long-Lived Ultracold Li₂ Molecules from a Fermi gases.*
75. S.J.J.M.F. Kokkelmans, G.V. Shlyapnikov, C. Salomon, Phys. Rev. A **69**, 031602@., (2004) arXiv: cond-mat/0308384, *Degenerate atom-molecule mixture in a cold Fermi gas.*
76. M. Fischer, N. Kolachevsky, M. Zimmermann, R. Holzwarth, Th. Udem, T.W. Hänsch, M. Abgrall, J. Grünert, I. Maksimovic, S. Bize, H. Marion, F. Peireira Dos Santos, P. Lemonde, G. Santarelli, P. Laurent, A. Clairon, C. Salomon, M. Haas, U.D. Jentschura and C.H. Keitel, Phys. Rev. Lett. **92**, 230802 (2004) " New Limits on the Drift of Fundamental Constants from Laboratory Measurements"
77. D.S. Petrov, C. Salomon, G. V. Shlyapnikov, Phys. Rev. Lett, **93**, 090404, (2004) arXiv: cond-mat/0309010, *Weakly bound dimers of fermionic atoms.*
78. T. Bourdel, L. Khaykovich, J. Cubizolles, J. Zhang, F. Chevy, M. Teichmann, L. Tarruel, S.J.J.M.F. Kokkelmans and C. Salomon, Phys. Rev. Lett. **93**, 050401 (2004), arXiv: cond-mat/0403091, *Experimental Study of the BEC-BCS Crossover Region in Lithium 6.*
79. C. Lämmerzahl, G. Ahlers, N. Ashby, M. Barmatz, P.L. Biermann, H. Dittus, V. Dohm, R. Ducan, K. Gibble, J. Lipa, N. Lockerbie, N. Mulders, C. Salomon, General Relativity and Gravitation, vol **36** n°3, 615 (2004), *Experiments in Fundamental Physics Scheduled and in Development for the ISS.*

80. S. Bize, P. Laurent, M. Abgrall, H. Marion, I. Maksimovic, L. Cacciapuoti, J. Grünert, C. Vian, F. Pereira dos Santos, P. Rosenbusch, P. Lemonde, G. Santarelli, P. Wolf, A. Clairon, A. Luiten, M. Tobar, C. Salomon, *C.R. Physique* **5** n° 8,829-843 (2004), *Advances in Atomic Fountains*.
81. J. Zhang, E.G.M. van Kempen, T. Bourdel, L. Khaykovich, J. Cubizolles, F. Chevy, M. Teichmann, L. Tarruell, S.J.J.M.F. Kokkelmans, C. Salomon, *Phys. Rev. A*, **70**, 030702 (2004), *P-wave Feshbach resonances of ultracold ^6Li* .
82. D.S. Petrov, C. Salomon, G.V. Shlyapnikov, *Phys. Rev. A* **71**, 012708 (2005), *Scattering properties of weakly bound dimers of fermionic atoms*.
83. S. Bize, P. Laurent, M. Abgrall, H. Marion, I. Maksimovic, L. Cacciapuoti, J. Grünert, C. Vian, F. Pereira dos Santos, P. Rosenbusch, P. Lemonde, G. Santarelli, P. Wolf, A. Clairon, A. Luiten, M. Tobar and C. Salomon, SPECIAL ISSUE:Einstein year, *J.Phys. B:At.Mo.Opt.Phys.*,**38** (2005)S449-S468, *Cold atom clocks and applications*.
84. F. Chevy, E.G.M. van Kempen, T. Bourdel, J. Zhang, L. Khaykovich, M. Teichmann, L. Tarruell, S.J.J.M.F. Kokkelmans and C. Salomon, *Phys. Rev. A*, **71**, 062710 (2005) , *Resonant scattering properties close to a p-wave Feshbach resonance*.
85. D.S. Petrov, C. Salomon and G.V. Shlyapnikov, *J. Phys.B:At.Mol.Opt.Phys.*,**38** (2005) S645-S660, *Diatomic molecules in ultracold Fermi gases - Novel composite bosons*.
86. F. Chevy and C. Salomon, *Physics World*, vol.**18** n°3 (2005), *Superfluidity in Fermi gases*.
87. C. Vian, P. Rosenbusch, H. Marion, S. Bize, L. Cacciapuoti, S. Zhang, M. Abgrall, D. Chambon, I. Maksimovic, P. Laurent, G. Santarelli, A. Clairon, A. Luiten, M. Tobar, C. Salomon, *IEEE* –vol.**54**, No 2, 833 (2005), *BNM-SYRTE Fountains : Recent Results*.
88. M. Zimmermann, M. Fischer, N. Kolachesvsky, R. Holzwarth, T. 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*, vol. **15**, n°7, (2005), pp997-1009, *High-Resolution Laser Spectroscopy and Time Variation of Fundamental Constants*.
89. Ph. Laurent, M. Abgrall, Ch. Jentsch, P. Lemonde, G. Santarelli, A. Clairon, I. Maksimovic, S. Bize, Ch. Salomon, D. Blonde, J.F. Vega, O. Grosjean, F. Picard, M. Saccoccio, M. Chaubet, N. Ladiette, L. Guillet, I. Zenone, Ch. Delaroche, Ch. Sirmain, *Appl. Phys. B* **84**, 683-690 (2006), *Design of the cold atom PHARAO space clock and initial test results*.
90. F. Chapelet, H. Marion, D. Chambon, C. Vian, P. Rosenbusch, S. Bize, C. Salomon, A. Luiten, M. Tobar, A. Clairon, *Journal de Physique IV* **135**, 115 (2006) *Advances in atomic fountains*
91. M. Kasevich and C. Salomon
Applied Physics B-Lasers and Optics **84** (4), 543 (2006) Quantum mechanics for space application: *From quantum optics to atom optics and general relativity*
92. S. Schiller, A. Goerlitz, A. Nevsky, J.C.J. Koelemeij, A. Vicht, P. Gill, H.A. Klein, H.S. Margolis, G. Miletì, U. Sterr, F. Riehle, E. Peik, Chr. Tamm, W. Ertmer, E. Rasel, V. Klein, C. Salomon, G.M. Tino, P. Lemonde, R. Holzwarth, T.W. Hänsch, *Nuclear Physics B, (Proc. Suppl.)* **166**, 300-302 (2007), *Optical Clocks in Space*.
93. G.M. Tino, L. Cacciapuoti, K. Bongs, Ch. Bordé, P. Bouyer, H. Dittus, W. Ertmer, A. Goerlitz, M. Inguscio, A. Langradin, P. Lemonde, A. Peters, E. Rasel, J. eichel, C. Salomon, S. Schiller, W. Schleich, K. Sengstock, U. Sterr, M. Wilkens, *Nuclear Physics*

- B, (Proc.Suppl.) **166**, 159-165 (2007), *Atom interferometers and atomic clocks: New quantum sensors for fundamental physics experiments in space*.
94. L. Cacciapuoti, N. Dimarcq and C. Salomon, Nuclear Physics B, (Proc. Suppl.) **166**, 303-306 (2007), *Atomic Clock Ensemble in Space : Scientific Objectives and Mission Status*.
 95. T-L Dao, A. Georges, J. Dalibard, C. Salomon and I. Carusotto, Phys.Rev.Lett., **98**, 240402 (2007), *Measuring the one-particle excitations of ultracold fermionic atoms by stimulated Raman spectroscopy*.
 96. D. Petrov, G. Astrakharchik, D. Papoular, C. Salomon, and G. Shlyapnikov, Phys.Rev.Lett., **99**, 130407 (2007), *Crystalline phase of strongly interacting fermi mixtures*.
 97. P. Wolf, Ch. J. Borde, A. Clairon, L. Duchayne, A. Landragin, P. Lemonde, G. Santarelli, W. Ertmer, E. Rasel, F.S. Cataliotti, M. Inguscio, G.M. Tino, P. Gill, H. Klein, S. Reynaud, C. Salomon, E. Peik, O. Bertolami, P. Gil, J. Paramos, C. Jentsch, U. Johann, A. Rathke, P. Bouyer, L. Cacciapuoti, D. Izzo, P. De Natale, B. Christophe, P. Touboul, S.G. Turyshev, J.D. Anderson, M.E. Tobar, F. Schmidt-Kaler, J. Vigue, A. Madej, L. Marmet, M-C. Angonin, P. Delva, P. Turrenc, G. Metris, H. Muller, R. Walsworth, Z.H. Lu, L. Wang, K. Bongs, A. Toncelli, M. Tonelli, H. Dittus, C. Lammerzahl, G. Galzerano, P. Laporta, J. Laskar, A. Fienga, F. Roques, K. Sengstock, *Quantum Physics Exploring Gravity in the outer solar system: the SAGAS project*, Experimental Astronomy, **23**(2), 651-687, (2009)
 98. S. Schiller, G. Tino, P. Gill, C. Salomon, U. Sterr, E. Peik, A. Nevsky, A. Görlitz, D. Svehla, R. Rummel, G. Ferrari, N. Poli, L. Lusanna, H. Klein, H. Margolis, P. Lemonde, W. Ertmer, E. Rasel, J. Müller, L. Iorio, C. Lämmerzahl, H. Dittus, E. Gill, M. Rothacher, F. Flechner, V. Flambaum, Wei-Tou Ni, Liang Liu, Xuzong Chen, Jingbiao Chen, L. Cacciapuoti, M. P. Heß, M. Schäfer, *Einstein Gravity Explorer - A class-M fundamental physics mission proposal for Cosmic Vision 2015- 2025*, Experimental Astronomy, Volume 23, Number 2 / mars 2009, p. 573, DOI 10.1007/s10686-008-9126-5
 99. W. Ertmer, M. Gilowski, S. Jöllenbeck, E.M. Rasel, C. Schubert, T. Wübbena, T. Wendrich, M. Zaiser, T.v. Zoest, Ch.J. Bordé, A. Clairon, A. Landragin, P. Lemonde, G. Santarelli, F.S. Cataliotti, M. Inguscio, N. Poli, F. Sorrentino, C. Modugno, G.M. Tino, P. Gill, H. Klein, H. Margolis, S. Reynaud, C. Salomon, E. Peik, U. Sterr, F. Riehle, O. Bertolami, C. Jentsch, U. Johann, A. Rathke, P. Bouyer, L. Cacciapuoti, P. De Natale, B. Christophe, B. Foulon, P. Touboul, L. Maleki, N. Yu, S.G. Turyshev, J.D. Anderson, F. Schmidt-Kaler, W. Schleich, R. Walser, J. Vigué, M-C. Angonin, P. Delva, P. Turrenc, H. Müller, L.J. Wang, K. Bongs, H. Dittus, C. Lämmerzahl, S. Theil, K. Sengstock, A. Wicht, A. Peters, R. Bingham, B. Kent, T. Müller, M. Arndt, L. Iess, R. Blatt, F. Bondu, A. Brille, E. Samain, M. L. Chiofalo, F. Levi, D. Calonico, *Matter-Wave Explorer of Gravity (Experimental Astronomy, in press 2008)*.
 100. C. Salomon, L. Cacciapuoti, and N. Dimarcq, Int. Journal of Mod. Phys. D, 2511 (2007), *Atomic Clock Ensemble in Space: an Update*
 101. S. Vitale, W. Ertmer and C. Salomon, *Timing Gravity*, Scientific American special issue "Looking up", p.50 (2008)
 102. Luigi Cacciapuoti and Christophe Salomon, *Space Clocks and Fundamental Tests: the ACES experiment*, EPJ Special topics, **172**, 57 (2009)
 103. Jean-Sébastien Bernier, Corinna Kollath, Antoine Georges, Lorenzo De Leo, Fabrice Gerbier, Christophe Salomon, and Michael Köhl , *Cooling fermionic atoms in optical lattices by shaping the confinement* , Phys. Rev. A **79**, 061601 (2009)

104. D. Petrov, C. Salomon, and G.V. Shlyapnikov, *Molecular Regimes in Ultracold Fermi Gases*, book chapter 10, in *Cold Molecules, theory, experiment, applications*, ed. R. Krems, W. Stwalley, B. Friedrich, CRC Press, Taylor and Francis, 2009
105. S. Reynaud, C. Salomon, and P. Wolf, *Space Science Reviews, Testing General Relativity with Atomic Clocks*, Springer Netherlands, DOI 10.1007/s11214-009-9539-0, (2009)
106. S. Bize, Ph. Laurent, P. Rosenbusch, J. Guéna, D. Rovera, M. Abgrall, G. Santarelli, P. Lemonde, F. Chapelet, P. Wolf, C. Mandache, A. Luiten, M. Tobar, Ch. Salomon, and A. Clairon, *Revue française de métrologie*, **18**, 13 (2009)
107. S. Nascimbene, N. Navon, K. J. Jiang, L. Tarruell, M. Teichmann, J. McKeever, F. Chevy, and C. Salomon, *Collective Oscillations of an Imbalanced Fermi Gas: Axial Compression Modes and Polaron Effective Mass*, *Phys. Rev. Lett.* **103**, 170402 (2009)
108. Stefano Vitale, Christophe Salomon und Wolfgang Ertmer, *Relativität auf dem Prüfstand*, Spektrum der Wissenschaft, p. 70 (2009)
109. S. Nascimbène, N. Navon, K. J. Jiang, F. Chevy, and C. Salomon, *Exploring the thermodynamics of a universal Fermi gas*, *Nature*, **463**, 1057 (2010)
110. N. Navon, S. Nascimbène, F. Chevy, and C. Salomon, *The Equation of State of a Low Temperature Fermi Gas with Tunable Interaction*, *Science* **328**, 729 (2010)
111. S. Nascimbène, N. Navon, F. Chevy, and C. Salomon, *The equation of State of ultracold Fermi gases: a few examples*, *New Journal of Physics*, *New Journal of Physics* **12** (2010) 103026
112. Peter Wolf, Luc Blanchet, Christian J. Bordé, Serge Reynaud, Christophe Salomon, and Claude Cohen-Tannoudji, *Does an atom interferometer test the gravitational redshift at the Compton frequency ?* *Class. Quantum Grav.* **28** 145017 doi:10.1088/0264-9381/28/14/145017 2011
113. Frederic Chevy, Sylvain Nascimbene, Nir Navon, Kaijun Jiang, Carlos Lobo and Christophe Salomon, *Thermodynamics of the unitary Fermi gas* in Proc of 22nd International Conference on Atomic Physics Location: Cairns, AUSTRALIA, JUL 25-30, 2010 Editor(s): Hannaford P; Bachor HA; Drummond PD Journal of Physics Conference Series Vol: **264**,. 012012 Published: 2011
114. S. Nascimbène, N. Navon, S. Pilati, F. Chevy, S. Giorgini, A. Georges, and C. Salomon, *Fermi-liquid behavior of the normal phase of a strongly interacting gas of cold atoms*. *Physical Review letters* Volume: **106** Issue: 21 Pages: 215303 Published: May 2011
115. N. Navon, S. Piatecki, K. Gunter, B. Rem, T. Nguyen, F. Chevy, , W. Krauth, C. Salomon, *Dynamics and thermodynamics of the low-temperature strongly interacting bose gas*. *Physical Review Letters* Vol. **107**, 135301 Published: Sept 2011
116. A. Ridinger, S. Chaudhuri, T. Salez, U. Eismann, D Fernandes, K. Magalhes, D. Wilkowski, C. Salomon and F. Chevy, *Large atom number dual-species magneto-optical trap for fermionic $6Li$ and $40K$ atoms*, *EUROPEAN PHYSICAL JOURNAL D*, Vol. **65**, 223, Published: NOV 2011
117. A. Ridinger, S. Chaudhuri, T. Salez, D Fernandes, N. Bouloufa, O. Dulieu, C. Salomon and F. Chevy, *Photoassociative creation of ultracold heteronuclear $(6)Li(40)K^*$ molecules* , *EPL* Vol. **96**, 3, 33001 Published: NOV 2011
118. C.G. Parthey, A. J. Alnis, B. Bernhardt, A. Beyer, R. Holzwarth, A. Maistrou, R Pohl, K. Predehl, T. Udem, T. Wilken, N. Kolachevsky, M. Abgrall, D. Rovera, C. Salomon,

- P. Laurent, T.W. Hansch, *Improved Measurement of the Hydrogen 1S-2S Transition Frequency*, Phys. Rev. Lett. **107**, 203001, NOV 2011
119. M.P. L. Stringhetti, B. Hummelsberger, K. Hausner, R. Stalford, R. Nasca, L. Cacciapuoti, R. Much, S. Feltham, T. Vudali, B. Leger, F. Picard, D. Massonnet, P. Rochat, P. Goujon, W. Schäfer, P. Laurent, P. Lemonde, A. Clairon, P. Wolf, C. Salomon, Y. Prochazka, U. Schreiber, O. Montenbruck, *The ACES mission: System development and test status*, ACTA ASTRONAUTICA, **69**, 929-938, DEC 2011
120. M.P. Hess, L. Stringhetti, B. Hummelsberger, K. Hausner, R. Stalford, R. Nasca, L. Cacciapuoti, R. Much, S. Feltham, T. Vudali, B. Leger, F. Picard, D. Massonnet, P. Rochat, P. Goujon, W. Schäfer, P. Laurent, P. Lemonde, A. Clairon, P. Wolf, C. Salomon, Y. Prochazka, U. Schreiber, O. Montenbruck, *The ACES mission: System development and test status*, ACTA ASTRONAUTICA, **69**, 929-938, (2011)
121. U. Eismann, F. Gerbier, C. Canalias, A. Zukauskas, G. Tréneç, J. Vigué, F. Chevy, and C. Salomon, *An all-solid-state laser source at 671 nm for cold-atom experiments with lithium*, Applied Physics B: Lasers and Optics **106**, 25 (2012),
122. P. Wolf, L. Blanchet, C.J. Bordé, S. Reynaud, C. Salomon, and C. Cohen-Tannoudji, *Reply to comment on: 'Does an atom interferometer test the gravitational redshift at the Compton frequency?'*, Class. Quantum Grav. **29**, 048002, (2012)
123. D. Rio Fernandes, F. Sievers, N. Kretschmar, S. Wu, C. Salomon, and F. Chevy, *Sub-Doppler laser cooling of fermionic 40K atoms in three-dimensional gray optical molasses*, Europhys. Lett. **100**, 63001, (2012)
124. B. Rem, A. Grier, I. Ferrier-Barbut, U. Eismann, T. Langen, N. Navon, L. Khaykovich, F. Werner, D. Petrov, F. Chevy, and C. Salomon, *"Lifetime of the Bose Gas with resonant Interactions*, Phys. Rev. Lett., **110**, 163202, (2013)
125. U. Eismann, A. Bergschneider, C. Salomon, and F. Chevy, *2.1 Watts intracavity-frequency-doubled all-solid-state light source at 671 nm for laser cooling of lithium*, Optics Express, **21**, 9091 (2013).
126. Nir Navon, Sylvain Nascimbène, Xavier Leyronas, Frédéric Chevy, Christophe Salomon *Condensation Energy of a Spin-1/2 Strongly Interacting Fermi Gas*, Phys Rev. A, **88**, 063614, (2013)
127. J. Bauer, C. Salomon, E. Demler, *Realizing a Kondo-correlated state with ultracold atoms*, Phys. Rev. Lett. **111**, 215304, (2013)
128. 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, *Precision Measurement of the Hydrogen 1S-2S Frequency via a 920-km Fiber Link*, Phys. Rev. Lett. **110**, 230801, (2013)
129. Andrew T. Grier, Igor Ferrier-Barbut, Benno S. Rem, Marion Delehaye, Lev Khaykovich, Frédéric Chevy, and Christophe Salomon, *Λ -enhanced sub-Doppler cooling of lithium atoms in D_1 gray molasses*, Phys. Rev. A **87**, 063411, (2013)
130. Igor Ferrier-Barbut, Marion Delehaye, Sebastien Laurent, Andrew T. Grier, Matthieu Pierce, Benno S. Rem, Frédéric Chevy, Christophe Salomon, *A Mixture of Bose and Fermi Superfluids*, Science **345**, 1035, (2014)
131. P. Laurent, M. Abgrall, I. Moric, P. Lemonde, G. Santarelli, A. Clairon, S. Bize, D. Rovera, J. Guéna, C. Salomon, M. Aubourg, F. Picard, P. Chatard, S. Léon, C. Sirmain,

- D. Massonnet, O. Grosjean, C. Delaroche, J-F. Végua, N. Ladiette, M. Chaubet, B. Léger, C-M. De Graeve, S. Julien, M. Saccoccio, D. Blonde, B. Faure, A. Ratsimandresy, S. Béraud, F. Buffe, I. Zenone, P. Larivière, C. Escandes, B. Vivian, C. Luitot, F. Gonzalez, J-P. Granier, P. Guillemot, C. Macé, S. Thomin, J-P. Lelay, T. Potier, Y. Cossart, T. Nauleau, A. Granget, *PHARAO : le premier étalon primaire de fréquence à atomes froids spatial, PHARAO : The first primary frequency standard using cold atoms for space applications, REVUE FRANÇAISE DE MÉTROLOGIE, 34, Volume 2, 2014*
132. F. Sievers, N. Kretschmar, D. R. Fernandes, D. Suchet, M. Rabinovic, S. Wu, C. Parker, L. Khaykovich, C. Salomon, and F. Chevy, *Simultaneous sub-Doppler laser cooling of fermionic ^6Li and ^{40}K on the D_1 line: theory and experiment*, Phys. Rev. A, **91**, 023426 (2015)
133. Y. Castin, I. Ferrier-Barbut, and C. Salomon, *The Landau critical velocity for a particle in a Fermi superfluid*, Comptes-Rendus Acad. Sciences, Paris, **16**, 241 (2015).
134. P. Laurent, D. Massonnet, L. Cacciapuoti, C. Salomon, *The ACES /PHARAO space mission*, Comptes-Rendus Acad. Sciences, Paris, **16**, 540 (2015),
135. C. Salomon, *Foreword of Special Issue on « Time measurement »*, Comptes-Rendus Acad. Sciences, Paris, **16**, 459 (2015).
136. M. Delehaye, S. Laurent, I. Ferrier-Barbut, S. Jin, F. Chevy, and C. Salomon, *Critical Velocity and Dissipation of an ultracold Bose-Fermi Counterflow*, Phys. Rev. Lett., **115**, 265303 (2015).
137. J. Bauer, E. Demler, C. Salomon, *Employing confinement induced resonances to realize Kondo physics with ultracold atoms*, Journal of Physics Conference Series, **592**, 012151 (2015)
138. P. Peterman, K. Gibble, P. Laurent, C. Salomon, *Microwave lensing frequency shift of the PHARAO laser-cooled microgravity atomic clock*, Metrologia **53**, 899, (2016)
139. D. Suchet, M. Rabinovic, T. Reimann, N. Kretschmar, F. Sievers, C. Salomon, J. Lau, O. Goulko, C. Lobo, and F. Chevy, *Analog simulation of Weyl particles with cold atoms*, EPL, **114**, 26005 (2016)
140. Ulrich Eismann, Lev Khaykovich, Sébastien Laurent, Igor Ferrier-Barbut, Benno S. Rem, Andrew T. Grier, Marion Delehaye, Frédéric Chevy, Christophe Salomon, Li-Chung Ha, Cheng Chin, *Universal Loss Dynamics in a Unitary Bose Gas*, Phys. Rev. X, **6**, 021025 (2016)
141. Frédéric Chevy and Christophe Salomon, *The unitary Bose gas*, J. Phys. B: At. Mol. Opt. Phys. **49**, 192001(2016)
142. S. Laurent, M. Pierce, M. Delehaye, T. Yefsah, F. Chevy, C. Salomon, *Connecting few-body inelastic decay to quantum correlations in a many-body system : a weakly coupled impurity in a resonant Fermi gas*, Phys. Rev. Lett., **118**, 103403 (2017)
143. Norman Kretschmar, Ulrich Eismann, Franz Sievers, Frédéric Chevy, and Christophe Salomon, *2.4-watts second-harmonic generation in ppZnO:LN ridge waveguide for lithium laser Cooling*, Optic Express **25**, 14840 (2017)
144. S. L. Bromley, S. Kolkowitz, T. Bothwell, D. Kedar, A. Safavi-Naini, M. L. Wall, C. Salomon, A. M. Rey, J. Ye, *Dynamics of interacting fermions under spin-orbit coupling in an optical lattice clock*, Nature Physics, February 5, (2018)
145. Siddarth Koduru Joshi^{1,2}, Jacques Pienaar¹, Timothy C Ralph³, Luigi Cacciapuoti⁴, Will McCutcheon², John Rarity², Dirk Giggengbach⁵, Jin Gyu Lim⁶, Vadim Makarov⁷, Ivette

Fuentes¹, Thomas Scheidl¹, Erik Beckert⁸, Mohamed Bourennane⁹, David Edward Bruschi¹⁰, Adán Cabello¹¹, Jose Capmany¹², Alberto Carrasco-Casado¹³, Eleni Diamanti¹⁴, Miloslav Dušek¹⁵, Dominique Elser¹⁶, Angelo Gulinatti¹⁷, Robert H Hadfield¹⁸, Thomas Jennewein¹⁹, Rainer Kaltenbaek²⁰, Michael A Krainak²¹, Hoi-Kwong Lo²², Christoph Marquardt¹⁶, Gerard Milburn²³, Momtchil Peev²⁴, Andreas Poppe²⁴, Valerio Pruneri²⁵, Renato Renner²⁶, Christophe Salomon²⁷, Johannes Skaar²⁸, Nikolaos Solomos²⁹, Mario Stipčević³⁰, Juan P Torres³¹, Morio Toyoshima¹³, Paolo Villoresi³², Ian Walmsley³³, Gregor Weihs³⁴, Harald Weinfurter³⁵, Anton Zeilinger¹, Marek Żukowski³⁶, Rupert Ursin¹ and (Space QUEST topical team), *Space QUEST mission proposal: experimentally testing decoherence due to gravity*, New Journal of Physics, Vol.20, June 2018

146. Tino, GM; Bassi, A., Bianco, G ; Bongs, K.; Bouyer, P ; Cacciapuoti, L ; Capozziello, S; Chen, XZ ; Chiofalo, ML; Derevianko, A; Ertmer, W; Gaaloul, N; Gill, P ; Graham, PW; Hogan, JM ; less, L ; Kasevich, MA ; Katori, H¹; Klempt, C ; Lu, XH; Ma, LS; Muller, H ; Newbury, NR; Oates, CW ; Peters, A; Poli, N ; Rasel, EM ; Rosi, G; Roura, A; Salomon, C ; Schiller, S; Schleich, W ; Schlippert, D; Schreck, F ; Schubert, C; Sorrentino, F; Sterr, U; Thomsen, JW ; Vallone, G ; Vetrano, F; Villoresi, P ; von Klitzing, W ; Wilkowski, D ; Wolf, P ; Ye, J ; Yu, N ; Zhan, MS. *SAGE: A proposal for a space atomic gravity explorer*, EPJD **73**, 228 (2019)
147. C. Salomon, Christophe; C. Borde, Christian; P. Fayet, The French Academy of Sciences and the systems of units: Along history! Foreword ; COMPTES RENDUS PHYSIQUE **20**, 1 (2019)
148. Joël Bergé, Luc Blanchet, Kai Bongs, Philippe Bouyer, Claus Braxmaier, Davide Calonico, Pierre Fayet, Naceur Gaaloul, Christine Guerlin, Aurélien Hees, Philippe Jetzer, Claus Lämmerzahl, Steve Lecomte, Christophe Le Poncin-Lafitte, Sina Loriani, Gilles Métris, Miguel Nofrarias, Ernst Rasel, Serge Reynaud, Manuel Rodrigues, Markus Rothacher, Albert Roura, Christophe Salomon, Stephan Schiller, Wolfgang P. Schleich, Christian Schubert, Carlos Sopena, Fiodor Sorrentino, Tim J. Sumner, Guglielmo M. Tino, Philip Tuckey, Wolf von Klitzing, Lisa Wörner, Peter Wolf, Martin Zelan, *Exploring the Foundations of the Universe with Space Tests of the Equivalence Principle*, arXiv:1908.11785 (2019)