LISTE DES TRAVAUX

Liste exhaustive à la date du 01/04/2024 des diverses publications et contributions scientifiques (orateur souligné, papier publié avec comité de lecture en bleu, et proceedings en bleu clair ; en vert article soumis) :

"Fils Vibrants Microfabriqués"
S. Triqueneaux, E. Collin, D. J. Cousins, T. Fournier, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Journées du CRTBT 1999
Saint-Nizier du Moucherotte, France, 21-23 Juin 1999.

"^{3}He Solide Antiferromagnétique 2D : Liquide de Spins ?"
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Physique en Clips 1999
Grenoble, France, 16 Décembre 1999.

1)-"Superfluidity of ^{3}He Contained in Aerogel"
D. J. Cousins, C. Bäuerle, Yu. M. Bunkov, A.-S. Chen, E. Collin and H. Godfrin
International Conference on Low Temperature Physics LT-22
Espoo and Helsinki, Finland, 4-11 Août 1999
Physica B Vol **284**, p. 311-312 (2000)

2)-"Microfabrication of Silicon Vibrating Wires"
S. Triqueneaux, E. Collin, D. J. Cousins, T. Fournier, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
International Conference on Low Temperature Physics LT-22
Espoo and Helsinki, Finland, 4-11 Août 1999
Physica B Vol. **284**, p. 2141-2142 (2000).

"2D-^{3}He : A Strongly Frustrated Quantum Magnet" (invité)
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Conference of the European Physical Society
Condensed Matter Division Meeting CMD-2000
Montreux, Switzerland, 13-17 Mars 2000.

"Frustrated Magnetism in Two-Dimensional ^{3}He" (invité)
E. Collin, R. Harakaly, S. Triqueneaux, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Proc. International Conference on Quantum Fluids and Solids QFS-2000
Minneapolis, Minnesota, USA, 6-11 Juin 2000.

"Nuclear Susceptibility of liquid ^{3}He"
S. Triqueneaux, E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Proc. International Conference on Quantum Fluids and Solids QFS-2000
Minneapolis, Minnesota, USA, 6-11 Juin 2000.

"Anomalous Superfluidity of ^{3}He confined inside Aerogel" (invité)
E. Collin, R. Harakaly, A.-S. Chen, D.J. Cousins, S. Triqueneaux, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Symposium E.U. Large Scale Facility User Meeting
Regensburg, Germany, 14-15 Juillet 2000.

“Frustrated Quantum Magnet and "Spin Liquid" Phase in Two-Dimensional ^{3}He”
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Groupement De Recherche Oxydes à propriétés remarquables
Aussois, France, 13-15 Septembre 2000.

“Frustrated Quantum Magnet and "Spin Liquid" Phase in Two-Dimensional ^{3}He”
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Groupement De Recherche Systèmes Fortement Corrélés
Aussois, France, 25-28 Septembre 2000.

“^{3}He Solide 2-Dimensionnel : Frustration Quantique et Liquide de Spins”
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Séminaire du CRTBT
Grenoble, France, 18 Septembre 2000.

3)-“Quantum Frustration and the "Spin Liquid" Phase of Two-Dimensional ^{3}He”
E. Collin, S. Triqueneaux, R. Harakaly, M. Roger, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Phys. Rev. Lett. Vol. **86**, no 11, p. 2447-2450 (12 March 2001).

“Diffusion de Spins dans l'^{3}He en Milieu Confiné”
E. Collin, R. Harakaly, Yu. Mukhraskii, Yu. M. Bunkov and H. Godfrin
Physique en Clips 2001
Grenoble, France, 23 Mars 2001.

“Nanoclusters Ferromagnétiques dans l'^{3}He Solide Bidimensionnel”
E. Collin, S. Triqueneaux, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Journées du CRTBT
Saint-Hughes de Biviers, France, 16-18 Mai 2001.

“Dissemination of the Ultra-Low Temperature Scale, PLTS-2000”
R. Rusby, D. J. Cousins, D. Head, P. Mohandas, Yu. M. Bunkov, C. Bäuerle, R. Harakaly, E. Collin, S. Triqueneaux, C. Lusher, J. Li, J. Saunders, B. Cowan, J. Nyéki, M. Digby, J. Pekola, K. Gloos, P. Hernandez, M. de Groot, A. Peruzzi, R. Jochemsen, A. Chinchure, W. Bosch, F. Mathu, J. Flokstra, D. Veldhuis, Y. Hermier, L. Pitre, A. Vergé, F. Benhalima, B. Fellmuth, J. Engert
Berlin, Germany, 19-21 Juin 2001, Proceedings of TEMPMEKO, Vols. **1&2**, B. Fellmuth, J. Seidel, G. Scholz (ed.), Berlin, VDE Verlag GmbH (2002).

“^{3}He Confined inside Aerogel”
E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
COSLAB Workshop
London, England, 7-10 Juillet 2001.

“Magnetic susceptibility of liquid ^{3}He”
E. Collin, R. Harakaly, S. Triqueneaux, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
International Conference on Quantum Fluids and Solids QFS-2001
Konstanz, Germany, 21-27 Juillet 2001.

"Phase coexistence in 2D solid ^{3}He adsorbed on ^{4}He preplated Graphite"
E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
International Conference on Quantum Fluids and Solids QFS-2001
Konstanz, Germany, 21-27 Juillet 2001.

"Mysterious properties of ^{3}He confined inside Aerogel"
E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
International Conference on Quantum Fluids and Solids QFS-2001
Konstanz, Germany, 21-27 Juillet 2001.

"2D-^{3}He : Quantum Frustration and Spin Liquid"
E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
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London, England, 26 Septembre 2001.

"Effets de désordre sur l'^{3}He à ultra-basses températures"
E. Collin, sous la direction de H. Godfrin et Yu. M. Bunkov, thèse de Doctorat, UJF Grenoble, France, 29 Janvier 2002.

"Microwave excitation of the Rydberg states of electrons on helium"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papageorgiou
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Brighton, England, 7-11 Avril 2002.

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London, England, 28 Mai 2002.

4)-"Search for supersymmetric Dark Matter with superfluid ^{3}He (MACHe3)"
F. Mayet, D. Santos, Yu. M. Bunkov, E. Collin, H. Godfrin
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"Microwave excitation of the Rydberg states of electrons on helium"
"Writing Q-bits using microwave Rabi oscillations"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papageorgiou
EU Network meeting electrons on cryogenic substrates
London, England, 21-22 Juin 2002.

"Excitation micro-onde des états électroniques sur Hélium ; vers l'ordinateur quantique"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papageorgiou
Séminaire Groupe Quantronique, SPEC-CEA
Saclay, France, 3 Juillet 2002.

"Excitation micro-onde des états électroniques sur Hélium ; vers l'ordinateur quantique"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papageorgiou
Séminaire fluides quantiques CRTBT
Grenoble, France, 9 Juillet 2002.

"2D-^{3}He : from a pure Spin-liquid phase to ferromagnetic nanoclusters" (invité)
E. Collin, R. Harakaly, C. Bäuerle, Yu. M. Bunkov and H. Godfrin
Int. Conf. on Low Temperature Physics LT23, Hiroshima, Japan, 20-27 Août 2002.

"Topological defects and coherent magnetization precession of ^{3}He in aerogel"
Yu. M. Bunkov, E. Collin, H. Godfrin, R. Harakaly
Int. Conf. on Low Temperature Physics LT23, Hiroshima, Japan, 20-27 Août 2002.

5)-"Detecting electrons on helium with a single-electron transistor (SET)"
G. Papageorgiou, Yu. Mukharsky, K. Harrabi, P. Glasson, P. Fozooni, P. G. Frayne, E. Collin and M. J. Lea
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6)-"Microwave saturation and the Rabi frequency of the Rydberg states of electrons on helium"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papageorgiou
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"Microwave excitation of the Rydberg states of electrons on helium ; towards quantum computing"
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea, G. Papagerogiou
Manchester University Physics department, England, 09 Octobre 2002.

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E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea and G. Papageorgiou
Phys.Rev.Lett. Vol. **89**, no 24 p. 5301-5304 (20 November 2002) ; Cond-mat/0208001.

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CRTBT Grenoble, France, 07 Avril 2003.

8)-"On the Spin-liquid phase of two-dimensional ^{3}He" (invité)
E. Collin, Yu.M. Bunkov, H. Godfrin
Conférence Highly Frustrated Magnets ILL, Grenoble, France, 26-30 Août 2003
J. Phys. : Condens. Matter Vol. **16** (2004) S691-S699.

9)-"Confined electron crystals and Rydberg states on liquid helium"
P.H. Glasson, E. Collin, P. Fozooni, P.G. Frayne, K. Harrabi, W. Bailey, G. Papageorgiou, Y. Mukharsky, M.J. Lea
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Nara, Japon, 14-18 Juillet 2003
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10)-"Topological defects and coherent magnetization precession of ^{3}He in aerogel"
Yu. M. Bunkov, E. Collin, H. Godfrin, R. Harakaly
Physica B, Vols. **329-333**, p. 305 (2003).

"Counting Electrons on Helium"
P.H. Glasson, E. Collin, P. Fozooni, P.G. Frayne, K. Harrabi, W. Bailey, G. Papageorgiou, M.J. Lea
EU Network meeting electrons on cryogenic substrates
Grenoble, France, 12 septembre 2003.

"Project of a superfluid ^{3}He detector for direct detection of non-baryonic dark matter : MACHe3"
E. Moulin, F. Naraghi, D. Santos, E. Collin, C. Winkelmann, Yu. Bunkov, and H. Godfrin
Proc. of the 4th. International Conference on "Where Cosmology and Fundamental Physics Meet", Marseille, June 2003, ArXiv: astro-ph/0309325.

"Superconducting Charge-flux Josephson Qubits" (invité)
E. Collin, G. Ithier, P. Joyez, D. Vion, D. Estève
Compte rendu de la conférence EUCAS, R. Vaglio, G. Donaldson, eds. In : *Proceedings of the 6th European Conference on Applied Superconductivity*, Sorrente, Italie, 14-18 septembre 2003, Institute of Physics Conference Series **181**, pp. 27–34 (2004).

"Present status of the Quantronium Experiment"
A. Aassime, E. Collin , A. Cottet, M. Devoret, D. Estève, G. Ithier, P. Joyez, H. Pothier, C. Urbina, D. Vion
Squbit2 workshop, Pise, Italie, 26-27 septembre 2003.

"Qubits Josephson : le Quantronium"
E. Collin, G. Ithier, A. Aassime, P. Joyez, D. Vion, D. Estève
Présentation des nouveaux arrivants, SPEC-CEA Saclay
Saclay, le 2 Décembre 2003.

"Counting Electrons on Liquid Helium"
P.Glasson, G.Papageorgiou, K.Harrabi, E.Collin, P.Fozooni, P.G.Frayne, W.Bailey, Y.Mukharsky, M.I.Dykman, V.Antonov and M.J.Lea
SSQIP 2003, Solid State Quantum Information Processing Conference
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"Operation of a Solid-state Quantum Bit Circuit"
E. Collin, G. Ithier, A. Aassime, P. Joyez, D. Vion, D. Estève
SSQIP 2003, Solid State Quantum Information Processing Conference
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11)-"Vibrating wire thermometry in superfluid ^{3}He"
C. B. Winkelmann, E. Collin, Yu. M. Bunkov, H. Godfrin,
J. of Low Temp. Phys. Vol. **135**, p. 3 (2004).

12)-"NMR-like Control of a Quantum Bit Superconducting Circuit"
E. Collin, G. Ithier, A. Aassime, P. Joyez, D. Vion, D. Estève
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"Decoherence measurements during the free evolution of a Josephson quantum bit : the quantronium" (invité)
G. Ithier, E. Collin, P. Joyez, P. Meesson, D. Vion, D. Estève, F. Chiarello, A. Shnirman, Y. Makhlin, G. Schön
Compte rendu de la conference MQC2, P. Silvestrini ed. : *IVth International Workshop on Macroscopic Quantum Coherence and Computing, (Kluwer Academic, Plenum Publishers, New York, 2005,* Naples, June 7-10 (2004).

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"Quantum information processing in solid states: Fighting Decoherence in a Josephson Qubit Circuit" (invité)
E. Collin, G. Ithier, A. Aassime, P. Joyez, D. Vion, D. Estève
Proceedings of the 39th Rencontres de Moriond "Quantum information and Decoherence in Nanosystems", D. C. Glattli, M. Sanquer and J. Tran Thanh Van (eds., Thê' Giöi Publishers, Vietnam) (2005), pp. 125-130, La Thuile, Italie, 25 Janvier au 1er Février 2004, Realizing Controllable Quantum States: Mesoscopic Superconductivity and Spintronics - In the Light of Quantum Computation, pp. 247–254 (2005).

"Manipulation de l'état quantique d'un circuit électrique supraconducteur"
E.Collin, G. Ithier, P. Joyez, D. Vion, and D. Estève
Conférence organisée par le CEA sur les nanotechnologies,
Grenoble, 17 juin (2004).

13)-"Magnetization and Spin-Diffusion of Liquid ^{3}He in Aerogel"
J.A. Sauls, Yu.M. Bunkov, E. Collin, H. Godfrin and P. Sharma
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14)-"Zener enhancement of quantum tunneling in a two-level superconducting circuit"
G. Ithier, E. Collin, P. Joyez, D. Vion, D. Estève, J. Ankerhold, H. Grabert
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15)-"^{3}He NMR in aerogel" (invité)
Yu. Bunkov, E. Collin, H. Godfrin
Todai International Symposium and the 9th ISSP International symposium on Quantum Condensed Systems, Kashiwa, Chiba, Japan 16-19 November (2004), Journal of Physics and Chemistry of Solids, Vol. **66**, Issues 8-9, p. 1325-1329 (August-September 2005).

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Chamrousse, Grenoble (France), 17-22 December 2004.

16)-"Counting individual trapped electrons on liquid Helium"
G. Papageorgiou, P. Glasson, K. Harrabi, V. Antonov, E. Collin, P. Fozooni, P.G. Frayne, M.J. Lea, D.G. Rees, Yu. Mukharsky
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G. Papageorgiou, P. Glasson, K. Harrabi, V.Antonov, E.Collin, P.Fozooni, P.G.Frayne, M.J.Lea, Y.Mukharsky and D.G.Rees
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"^{3}He NMR in aerogel"
E. Collin, Yu. Bunkov, H. Godfrin
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17)-"Decoherence in a superconducting quantum bit circuit"
G. Ithier, E. Collin, P. Joyez, P. J. Meeson, D. Vion, D. Estève, F. Chiarello, A. Shnirman, Y. Makhlin, J. Schriefl, and G. Schön
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" Solid state quantum bit circuit "
G. Ithier, F. Nguyen, E. Collin, N. Boulant, P.J. Meeson, P. Joyez, D. Vion, and D Estève, edited by G. Benenti in "*Proceedings of the International School of Physics Enrico Fermi on Quantum Computers, Algorithms and Chaos*", Varenna, Italy, July 5-15 (2005), proceedings of the International School of Physics "Enrico Fermi", 162, pp. 447–469 (2006).

"Superfluid ^{3}He: application for measurments in astrophysics" (invité)
Yu.M. Bunkov, E. Collin, H. Godfrin,
ULT-2005, Gainesville, Florida, USA,18-20 August 2005.

"How accurately do we know the F0a Landau parameter of liquid ^{3}He ?"
H. Godfrin, V. Goudon, S. Triqueneaux, Th. Prouvé, E. Collin, Yu. M. Bunkov
24th. International Conference on Low Temperature Physics LT24
Orlando, Florida, USA, 10-17 august 2005.

"Les ultra-basses températures à la recherche de la matière sombre de l'Univers" (invité)
H. Godfrin, Yu. M. Bunkov, E. Collin
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Université de Pau, en liaison audiovisuelle avec l'Université de Bordeaux
Pau, 22 septembre 2005.

18)-"Trapping Single Electrons on Liquid Helium"
P. Glasson, G. Papageorgiou, K. Harrabi, D.G. Rees, V. Antonov, E. Collin, P. Fozooni, P.G. Frayne, Y. Mukharsky and. M.J. Lea
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Yu. Bunkov, E. Collin, H. Godfrin
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El proyecto ULTIMA : detectores de particulas a ultrabajas temperaturas (conférence invitée)
H. Godfrin, Yu. M. Bunkov, E. Collin
50 años del Institudo de Fisica Dr. J. A. Balseiro
Centro Atomico Bariloche
Bariloche, Argentine, 21/12/2005.

"ULTIMA: a 100 µK superfluid ^{3}He detector"
E. Collin, Yu. M. Bunkov, H. Godfrin
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19)-"Ferromagnetic Nanoclusters in two-dimensional ^{3}He"
E. Collin, C. Bäuerle, Yu.M. Bunkov and H. Godfrin
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C.B. Winkelmann, J. Elbs, E. Collin, Yu.M. Bunkov, H. Godfrin
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22) “Decoherence of a josephson quantum bit during its free evolution: The quantronium”
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In: Ruggiero, B., Delsing, P., Granata, C., Pashkin, Y., Silvestrini, P. (eds), Quantum Computing in Solid State Systems, pp. 1–9 (2006).

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Conference Information: 3rd International Symposium on Mesoscopic Superconductivity and Spintronics, Date: MAR 01-04, 2004 Atsugi City JAPAN
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“Decoherence sources of a superconducting quantum bit”
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23)-“Heat capacity of adsorbed ^{3}He at ultra-low temperatures”
J. Elbs, C.B. Winkelmann, Yu.M. Bunkov, E. Collin, H. Godfrin
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E. Collin, H. Godfrin, Yu. M. Bunkov, L. Filleau, and T. Fournier
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Yu.M. Bunkov, E. Collin, H. Godfrin,
Kamioka Netrino Observatory, Institute for Cosmic Ray Research, Tokyo University,
23 October 2006.

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E.Collin, Yu. Bunkov, H. Godfrin
Workshop on Dark Matter Search and Related Topics, Grenoble, le 17/01/2007.

"Decoherence of a quantum bit circuit"
Ithier, G; Nguyen, F; Collin, E; Boulant, N; Meeson, PJ; Joyez, P; Vion, D; Esteve, D,
Conference Information: Poincare Seminar 2005, Date: APR, 2005 Inst Henri Poincare Paris FRANCE
Source: QUANTUM DECOHERENCE: POINCARE SEMINAR 2005 Volume: 48 Pages: 125-149, Published: 2007.

"Micromécanique à basse température"
Séminaire MCBT-Institut Néel
E. Collin, Grenoble le 06/03/2007.

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Yu. Bunkov E. Collin, H. Godfrin
Journées du département MCBT 14 mai 2007.

26)-"Electron nuclear recoil discrimination by pulse shape analysis"
J. Elbs, Yu. M. Bunkov, E. Collin, H. Godfrin, O. Suvorova
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1-6 August, 2007 Kazan State University, Russian Federation.
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27)-"ULTIMA: Magnetic field dependence of the calibration factor"
J. Elbs, Yu. M. Bunkov, E. Collin, H. Godfrin, O. Suvorova, C. Winkelmann
12th International Workshop on Low Temperature Detectors, LTD12, Paris July 22-27, 2007
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"A quantum fluid used as a detector for Dark Matter: superfluid ^{3}He"
J. Elbs, Yu.M. Bunkov, E. Collin, H. Godfrin
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Kazan State University, Russian Federation, 1-6 August, 2007.

28)-"Silicon Vibrating Wires at Low Temperatures"
Eddy Collin, Laure Filleau, Thierry Fournier, Yuriy M. Bunkov and Henri Godfrin
J. of Low Temp. Phys., vol. **150**, no 5-6, p. 739 – 790 (2008); DOI: 10.1007/s10909-007-9607-3
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"Micro-mechanics at low temperatures" (invité)
E. Collin, Yu. Bunkov, H. Godfrin
Workshop on Low Temperature Physics
Japan-France Joint Project
Kyoto, Japan, 12-13 April 2008.

29)-"Strong Orientational Effect of Stretched Aerogel on the ^{3}He Order Parameter"
J. Elbs, Yu. M. Bunkov, E. Collin, H. Godfrin, and G. E. Volovik
Phys. Rev. Lett. Vol. **100**, 215304 (2008).

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Philip Glasson, David Rees, Luke Simkins, Vladimir Antonov, Peter Frayne, Mike Lea, Philip Meeson, RHUL
and Eddy Collin, I. NEEL
RIKEN electrons on Helium workshop, japan, 7 avril 2008.

Atelier de l'Institut Néel,
H. Godfrin, E. Collin, B. Canals, J-C. Anglès d'Auriac
"frustration magnétique" le 5 juin 2008, Grenoble.

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Yu. Bunkov, E. Collin, H. Godfrin
"cryogénie" le 11 juin 2008, Grenoble.

"Manipulation of the order parameter of superfluid ^{3}He by the anisotropy of aerogel"
Yu. Bunkov, E. Collin, J. Elbs, H. Godfrin, G. Volovik
LT25 conference on low temperature physics, Amsterdam 6-13 august 2008.

30)-"Magnetic susceptibility of liquid ^{3}He"
V. Goudon, S. Triqueneaux, E. Collin, Yu. Bunkov, H. Godfrin
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Published in the proceedings "Journal of Physics: Conference Series" (JPCS), J. of Physics, Conference Series, **150** 032024 (2009).

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E. Collin, B. Canals, J.-C. Anglès d'Auriac, H. Godfrin
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E. Collin, Y. Bilbao-Zarraga, Yu. M. Bunkov, H. Godfrin
ULT 2008 conference frontiers of low temperature physics, Royal Holloway University of London, England, 14-17 August 2008.

"ULT MNEMS" (invité)
E. Collin, Yu. Bunkov, H. Godfrin
Séminaire Quantronique,
CEA Saclay, 5 septembre 2008.

32)-"Thermally excited tunneling from a metastable electronic state in a single-Cooper-pair transistor"
D. G. Rees, P. Glasson, L. R. Simkins, E. Collin, V. Antonov, P. G. Frayne,
P. J. Meeson, and M. J. Lea
Appl. Phys. Lett. **93**, 173508 (2008).

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« Ultima : de l'hélium trois ultra-froid pour traquer la Matière Noire »
H. Godfrin, E. Collin, Yu. Bunkov (invited talk)
Association Française du Froid - Commission de Cryogénie et de Supraconductivité
9èmes Journées de Cryogénie et de Supraconductivité
AUSSOIS 25-27 mars 2009.

33)-" 'Fast Exchange' model visualized with ^{3}He confined in aerogel: a Fermi liquid in contact with a Ferromagnetic solid"
E. Collin, S. Triqueneaux, Yu.M. Bunkov and H. Godfrin
Phys. Rev. B **80**, 094422-1 (2009).

34)-"Novel 'vibrating wire like' NEMS and MEMS structures for low temperature physics"
E. Collin · J. Kofler · J.-S. Heron · O. Bourgeois · Yu. M. Bunkov · H. Godfrin (invité)
QFS 2009, Northwestern University, 05-11/08/2009
J. of Low Temp. Phys., Volume **158**, Issue 3, page 678 (2010); DOI 10.1007/s10909-009-9960-5

35)-"Evidence for magnon BEC in superfluid ^{3}He-A"
P. Hunger, Yu. M. Bunkov, E. Collin, and H. Godfrin
QFS 2009, Northwestern University, 05-11/08/2009
J. of Low Temp. Phys., Volume **158**, Issue 1, page 129 (2010); DOI 10.1007/s10909-009-9970-3

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L.R. Simkins, D.G. Rees, P.H. Glasson, V. Antonov, E. Collin, P.G. Frayne, P.J. Meeson, M.J.Lea
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Virtual Journal of Applications of Superconductivity (http://www.vjsuper.org).

37)-"Metallic coatings of microelectromechanical structures at low temperatures: Stress, elasticity, and nonlinear dissipation"
E. Collin, J. Kofler, S. Lakhloufi, S. Pairis, Yu. M. Bunkov, and H. Godfrin,
Journal of Applied Physics, Vol. **107**, Issue 11, 114905 (7 June 2010).

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E. Collin, Yu. Bunkov, H. Godfrin
PTB-Low temperature workshop, Berlin, Germany (10.12.2009).

"Micro & Nano mechanics within Ultra-Low Temperature Physics"
E. Collin, Yu. Bunkov, H. Godfrin
Workshop on "Quantum Transport in Nano Electro Mechancal Systems",
Bordeaux 08-09 April 2010, France.

38)-"Addressing geometric non-linearities with cantilever MEMS: beyond the Duffing model"
E. Collin, Yu.M. Bunkov, H. Godfrin
Phys. Rev. B vol. **82**, 235416 (2010).

"Superfluid ^{3}He immersed in radially squeezed aerogel: BEC of magnons and superfluid phase transition"
P. Hunger, Yu.M. Bunkov, E. Collin, H. Godfrin
QFS 2010 Grenoble, 1rst-7th august 2010.

39)-"A tunable hybrid electro-magnetomotive NEMS device for low temperature physics"
QFS 2010 Grenoble, 1rst-7th august 2010
E. Collin, T. Moutonet, J.-S. Heron, O. Bourgeois, Yu.M. Bunkov, H. Godfrin
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H. Godfrin, H. Meyer, Y. Bunkov, and E. Collin,
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"Ultra-cold micro/nanomechanics"
E. Collin
Journées du département MCBT, Villard de Lans, 12 octobre 2010.

"Microkelvin JRA4 in Grenoble"
E. Collin, Yu. Bunkov, H. Godfrin
Microkelvin JRA4 meeting, Heidelberg, 05/11/2010.

"Micro and Nano mechanics at ultra-low temperature"
E. Collin
France-Japan Collaboration Workshop,
RIKEN low temperature laboratory,
17/01/2011, Tokyo, Japan.

"Micro/nano mechanics at very low temperatures"
E. Collin
Topical Meeting on Nanomechanics
23 juin 2011, Institut Néel, CNRS-Grenoble, France.

40)-"Nonlinear parametric amplification in a tri-port nanoelectromechanical device"
E. Collin, T. Moutonet, J.-S. Heron, O. Bourgeois, Yu. M. Bunkov, H. Godfrin,
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E. Collin, M. Defoort, T. Moutonet, J. -S. Heron, O . Bourgeois, Yu. M. Bunkov, H . Godfrin, And F. Pistolesi,
OMNT meeting on nanomechanics, 4-5 juillet 2011, Toulouse (France).

"Low temperature nanomechanical probes: from linear to nonlinear regimes" (invité)
E. Collin, Yu. Bunkov, H. Godfrin
The 26th international conference on low temperature physics (LT26)
Beijing, China 10-17 august 2011.

41)-"Superfluid transition in superfluid ^{3}He in radially compressed aerogel"
P. Hunger, Yu. M. Bunkov, E. Collin, and H. Godfrin,
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Beijing, China 10-17 august 2011,
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42)-"Audio mixing in a tri-port nano-electro-mechanical device"
M. Defoort, K. Lulla, J-S. Heron, O. Bourgeois, E. Collin, and F. Pistolesi
Appl. Phys. Lett. **99**, 233107 (2011).
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E. Collin, M. Defoort, K. Lulla, Yu.M. Bunkov, H. Godfrin, O. Bourgeois, F. Pistolesi
CMMP11 conference, 13 - 15 December 2011, Manchester, UK.

43)-"In-situ comprehensive calibration of a tri-port nano-electro-mechanical device"
E. Collin, M. Defoort, K. Lulla, T. Moutonet, J.-S. Heron, O. Bourgeois, Yu. M. Bunkov, H. Godfrin
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"Nano-mechanics"
E. Collin
French-Japanese collaboration workshop, 27/01/2012, Institut Néel – Grenoble.

"Nonlinear dynamics in nanomechanical resonators" (invited)
E. Collin, M. Defoort, K. Lulla, J-S. Heron, A. Sultan, T. Moutonet, O. Bourgeois, Yu. Bunkov, H. Godfrin, and F. Pistolesi
Microkelvin meeting, Smolenice, Slovakia, 18-24 march 2012.

"Low temperature micro/nano mechanics" (invited)
E. Collin, M. Defoort, K. Lulla, C. Blanc, O. Bourgeois, Yu. Bunkov, H. Godfrin
OIST workshop on Nonequilibrium Phenomena in Complex Quantum Systems: from Correlated Electrons to Mesoscopic Devices, Okinawa, Japan 23-27 April 2012.

"Silicon nitride mechanical nano-resonators"
K. Lulla, M. Defoort, C. Blanc, O. Bourgeois, Yu.M. Bunkov, H. Godfrin, and E. Collin,
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"Nonlinear dynamics in nanomechanical resonators" (invited)
E. Collin, M. Defoort, K. Lulla, C. Blanc, J-S. Heron, T. Moutonet, F. Pistolesi, O. Bourgeois, Yu.M. Bunkov, and H. Godfrin
QFS 2012, Lancaster 15-21 august 2012, UK.

44)-"Stressed Silicon Nitride Nanomechanical Resonators at Helium Temperatures"
M. Defoort, K.J. Lulla, C. Blanc, H. Ftouni, O. Bourgeois, and E. Collin,
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J. of Low Temp. Phys., Vol. **171**, Issue 5-6, p. 731-736 (June 2013); DOI 10.1007/s10909-012-0693-5.

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CMD-CMMP 2012, Edinburgh, 02-07 September 2012, UK.

"Silicon nitride mechanical nano-resonators"
K. Lulla, M. Defoort, C. Blanc, O. Bourgeois, Yu.M. Bunkov, H. Godfrin, and E. Collin,
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45)-"Thermal conductivity measurement of suspended Si-N membranes from 10 K to 275 K using the 3ω-Völklein method"
H. Ftouni, C. Blanc, A. Sikora, J. Richard, M. Defoort, K. Lulla, E. Collin, O. Bourgeois,
Eurotherm 2012, 04-07 September 2012, Poitiers, France.
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"Efficient parametric amplification in a nano-electro-mechanical device"
E. Collin & O. Bourgeois
Néel Institute / Highlights 6 (Sept. 2012).

"Micro/nano mechanics at low temperatures: a nonlinear issue"
E. Collin
Séminaire MCBT-Institut Néel, Grenoble, le 30/10/2012.

46)- "Evidence for the role of normal-state electrons in nanoelectromechanical damping mechanisms at very low temperatures"
K.J. Lulla, M. Defoort, C. Blanc, O. Bourgeois, and E. Collin
Phys. Rev. Lett. Vol. **110**, 177206 (2013).

"Micro et nano mécanique : pour faire quoi ? Enjeux techniques & Scientifiques"
E. Collin, groupe UBT
Séminaire ITA – Néel, février 2013.

"Phonon Thermal Transport in Periodically Structured Nanosystems**"**
C. Blanc, K.J. Lulla, D. Taïnoff, H. Ftouni, Y. I. Liu, A. Rajabpour, S. Volz, T. Fournier, M. Defoort, E. Collin, O. Bourgeois
Phononics 2013, Egypt, june 2013.

47) **"**Modal "self -coupling" as a sensitive probe for nanomechanical detection**"**
M. Defoort, K.J. Lulla, C. Blanc, O. Bourgeois, A.D. Armour, and E. Collin
Appl. Phys. Lett. Vol. **103**, pp. 013104 (2013).

48) "Modal Decomposition in Goalpost Micro/nano Electro-mechanical Devices"
E. Collin, M.Defoort, K.J. Lulla, C. Blanc, J. Guidi, S. Dufresnes, O. Bourgeois, H. Godfrin
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“Energy Dissipation in Nano-electro-mechanical Devices at Millikelvin Temperatures”
M. Defoort, K. J. Lulla, C. Blanc, O. Bourgeois, and E. Collin
QFS 2013 Matsue, Japan, 01 – 06 August 2013 (invited).

“Energy dissipation in nano-electro-mechanical devices at mK temperatures”
E. Collin,
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49) "Specific heat measurement of thin suspended SiN membrane from 8 K to 300 K using the 3ω-Völklein method"
Hossein Ftouni, Dimitri Tainoff, Jacques Richard, Kunal Lulla, Jean Guidi, Eddy Collin, and Olivier Bourgeois
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« QNM – Quantum Nano Mechanics »
E. Collin
J3N Marseille, France, 04 – 06 novembre 2013.

« Micro/nano-mechanical cryogenic resonators: nonlinearities and energy dissipation »
E. Collin
Physics seminar, Lancaster University, UK, 06 décembre 2013.

“Micro/nano electro-mechanical cryogenic resonators”
E. Collin
Physics lecture
7 février 2014, Heidelberg, Germany.

50) "Electrical conductance of bolted copper joints for cryogenic applications"
F. Blondelle, A. Sultan, E. Collin, H. Godfrin
J. of Low. Temp. Phys. Vol. **175** (no 5/6), 877 (2014).

“Low Temperature Micro and Nano Electro-Mechanics”
E. Collin
Soutenance de HdR
Grenoble, 21 février 2014.

51) “Slippage and boundary layer probed in an almost-ideal gas by a nano-mechanical oscillator”
M. Defoort, K.J. Lulla, T. Crozes, O. Maillet, O. Bourgeois, and E. Collin
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Editor’s suggestion, http://journals.aps.org/prl.

“From Fermi liquid to Mott-Hubbard localization in 2D ^{3}He”
H. Godfrin and E. Collin
ATOMS2014, Advanced Topics in Magnetism and Superconductivity
San Carlos de Bariloche, 31st of July - 4th of August (2014).

“Low temperature physics with nano-electro-mechanical systems”
E. Collin, M. Defoort, K.J. Lulla, O. Bourgeois, H. Godfrin
LT27, Buenos Aires, 6 - 13 August (2014).

“Fundamental nonlinear phenomena in nano-mechanical devices” (invité)
E. Collin, M. Defoort, K.J. Lulla and O. Bourgeois
ULT2014, San Carlos de Bariloche, 15-19 august 2014.

“Probing Bogoliubov QP in superfluid ^{3}He with a 'vibrating-wire like' MEMS device”
M. Defoort, S. Dufresnes, H. Godfrin and E. Collin (Institut Néel)
S.L. Ahlstrom, A. J. Woods, E.A. Guise, M. Poole and S.N. Fisher (ULANC)
ULT2014, San Carlos de Bariloche, 15-19 august 2014.

52) “Scaling laws for the bifurcation-escape rate in a nanomechanical resonator”
M. Defoort, V. Puller, O. Bourgeois, F. Pistolesi, and E. Collin
Phys. Rev. E **92**, 050903(R) (2015) Rapid Com; arXiv:1409.6971.

“Low temperature physics with NEMS”
E. Collin
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“Low temperature damping in a nano-electro-mechanical device”
E. Collin & O. Bourgeois
Néel Institute / Highlights 8 (Sept. 2014).

53) “Thermal conductivity of silicon nitride membranes is not sensitive to stress”
Hossein Ftouni, Christophe Blanc, Dimitri Tainoff, Andrew Fefferman, Kunal J. Lulla, Jacques Richard, Eddy Collin, and Olivier Bourgeois
Phys. Rev. B Vol. **92**, 125439 (2015); arXiv:1506.01838.

“Cryogenic nano-electro-mechanical devices as model systems for classical issues in physics” (invité)
E. Collin
30 years of Quantronics Workshop, Paris-Diderot, 22-25 june 2015.

“Probing mesoscopic lengthscales in (super)fluid ^{3}He” (invité)
E. Collin
Grand Challenges in QFS meeting, Buffalo (USA) 7-8 aout 2015.

“Mesoscopic nano-mechanical probes for quantum fluids & solids” (invité)
E. Collin, H. Godfrin, A. Fefferman,
International conference on QFS, Niagara Falls (USA) 9-15 aout 2015.

54) “Probing Bogoliubov quasiparticles in superfluid ^{3}He with a ’vibrating-wire like’ MEMS device”
M. Defoort, S. Dufresnes, S.L. Ahlstrom, E.A. Guise, M. Poole, A.J. Wood, V. Tsepelin, S.N. Fisher, H. Godfrin and E.Collin
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J. of Low Temp. Phys. Vol. **183**, p. 284 (2016); arXiv:1512.01033.
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55) “Classical decoherence in a nanomechanical resonator”
Olivier Maillet, Frantisek Vavrek, Andrew Fefferman, Olivier Bourgeois & Eddy Collin
New J. Phys. **18**, 073022 (2016); arXiv:1511.02120v4.

"Elastic measurements of TLSs in amorphous silicon at mK temperatures"
A. Fefferman, E. Collin, Xiao Liu, Thomas Metcalf and Glenn Jernigan
Gordon Research Conference 6-11 march 2016, Ventura CA USA.

"Classical Decoherence in a Nanomechanical Resonator"
O. Maillet, F. Vavrek, A.D. Fefferman, O. Bourgeois and E. Collin
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A. Fefferman E. Collin, Xiao Liu, Thomas Metcalf and Glenn Jernigan
March meeting 14-18 march 2016, Baltimore MD USA.

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March meeting 14-18 march 2016, Baltimore MD USA.

"Ultra-basse température, système modèle pour la physique fondamentale"
E. Collin
Journées du département MCBT, Villard de Lans 12-13 mai 2016.

"Nonlinear dynamics and fluctuations in (micro)nanomechanical systems"
E. Collin
Séminaire nanoélectronique quantique, Grenoble 31 mai 2016.

"Cryo. pour les Ultra-basses températures"
E. Collin
Alliance cryogénie LANEF, Grenoble 3 juin 2016.

"Nonlinearity-induced frequency fluctuations in a nanomechanical resonator"
O. Maillet, X. Zhou, A.-I. Maldonado-Cid, R. R. Gazizulin, A. D. Fefferman, O. Bourgeois, E. Collin
JMC15 Bordeaux 22-26 aout 2016.

"Nanomechanical beams for sub-coherence length studies in superfluid ^{3}He" (invité)
E. Collin, R. Gazizulin, O. Maillet, A. Fefferman
QFS 2016, Prague, Rép Tchèque 10-16 aout 2016.

"Elastic measurements of TLSs in amorphous silicon at mK temperatures"
A. Fefferman, A. Maldonado-Cid and E. Collin, X. Liu, T. Metcalf and G. Jernigan
QFS 2016, Prague, Rép Tchèque 10-16 aout 2016.

56) "Elastic measurements of amorphous silicon films at mK temperatures"
A. Fefferman, A. Maldonado, E. Collin, X. Liu, T. Metcalf and G. Jernigan
J. of Low Temp. Phys. Vol. 187, pp 654 (2017); arXiv:1610.06778.

"Boundary layer of gaseous ^{4}He and superfluid films probed by a nano- mechanical device at Kelvin temperatures"
R. R. Gazizulin, O. Maillet, A. I. Maldonado Cid, X. Zhou, T. Crozes, O. Bourgeois, A. D. Fefferman, E. Collin
QFS 2016, Prague, Rép Tchèque 10-16 aout 2016 (Last minute poster).

“Nano/micro mécanique aux ultra-basses températures”
E. Collin
GDR Opto-méca Q
Paris, Jussieu 20-21 sept 2016.

“MEMS and NEMS for Quantum fluids & Solids”
E. Collin
Cours CryoSchool Helsinki 26 Sept – 3 Oct. 2016 (cours invité).

“Interplay between amplitude fluctuations and nonlinear dynamics in NEMS”
E. Collin
FNS conference, La Thuile, Italy 05-10 febuary 2017 (invité).

“Boundary layer in ^{4}He gas and superfluid 4He films probed by nano-mechanical oscillator”
R. Gazizulin, O. Maillet, A. I. Maldonado Cid, X. Zhou, T. Crozes, O. Bourgeois, A. Fefferman and E. Collin,
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“Elastic measurements of TLSs in amorphous silicon at mK temperatures”
A. Fefferman, A. Maldonado-Cid, and E. Collin, X. Liu, T. Metcalf and G. Jernigan
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“Interplay between amplitude fluctuations and nonlinear dynamics in NEMS”
E. Collin,
Séminaire, 27 janvier 2017, Konstanz, Germany.

57) “Universality of thermal transport in amorphous nanowires at low temperatures”
Adib Tavakoli, Christophe Blanc, Hossein Ftouni, Kunal J. Lulla, Andrew D. Fefferman, Eddy Collin, and Olivier Bourgeois
Phys. Rev. B **95**, 165411 (2017); arXiv:1703.08396.

“Interplay between amplitude fluctuations and nonlinear dynamics in NEMS”
E. Collin,
Workshop “Nanomechanics at low temperatures: from classical to quantum”, University of Nottingham UK, 11 April 2017.

58) “Non-linear Frequency Transduction of Nano-mechanical Brownian Motion”
Olivier Maillet, Xin Zhou, Rasul Gazizulin, Ana Maldonado Cid, Martial Defoort, Olivier Bourgeois, Eddy Collin,
Phys. Rev. B **96**, 165434 (2017); arXiv:1704.06119.

59) “Temperature Dependent Energy Levels of Electrons on Liquid Helium”
E. Collin, W. Bailey, P. Fozooni, P. G. Frayne, P. Glasson, K. Harrabi, M. J. Lea,
Phys. Rev. B **96**, 235427 (2017); arXiv:1707.02119.

“Nonlinear Frequency Transduction of Nanomechanical Brownian Motion”
O. Maillet, X. Zhou, A. I. Maldonado Cid, R. R. Gazizulin, A. D. Fefferman, O. Bourgeois & E. Collin,
QTC (LT28Satellite) Espoo (Finland), 5-8 August 2017.

"On-chip mechanical thermometry at mK temperatures"
X. Zhou, R. R. Gazizulin, O. Maillet, A. D. Fefferman, E. Collin,
QTC (LT28Satellite) Espoo (Finland), 5-8 August 2017.

"Non-linear Frequency Transduction of nanomechanical Brownian Motion"
O. Maillet, X. Zhou, A. I. Maldonado Cid, R. R. Gazizulin, A. D. Fefferman, O. Bourgeois & E. Collin
LT28 Göteborg (Sweden), 9-16 August 2017 (invited).

"Investigating nonlinear decoherence in a nanomechanical resonator"
O. Maillet, X. Zhou, A. I. Maldonado Cid, R. R. Gazizulin, A. D. Fefferman, O. Bourgeois & E. Collin
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"In-equilibrium thermodynamics of a mesoscopic mechanical object: towards the quantum ground-state"
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"Development of continuous sub-mK refrigeration for ground-state cooling of mechanical resonators"
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"Anomalous nonlinear features in the self-oscillation regime of microwave optomechanical devices"
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