Patrice ROCHE

LISTE DE PUBLICATION

43 publications avec comité de lecture
Indice h = 23 / 1680 citations
18 Physical Review Letters / 1 Nature

ISI : AU=ROCHE P* AND (AU=GLATTLI D* OR AU=BALIBAR S* OR AU=WILLIAMS F* OR AU=PORTIER F*)

Revues avec comité de lecture

43. Antibunched Photons Emitted by a dc-Biased Josephson Junction
C. Rolland, A. Peugeot, S. Dambach, M. Westig, B. Kubala, Y. Mukharsky, C. Altimiras, H. Lesueur, P. Joyez, D. Vion, P. Roche, D. Esteve, J. Ankerhold, and F. Portier
Phys. Rev. Lett. 122, 186804 (2019)

42. Strongly Correlated Charge Transport in Silicon Metal-Oxide-Semiconductor Field-Effect Transistor Quantum Dots
M. Seo, P. Roulleau, P. Roche, D. C. Glattli, M. Sanquer, X. Jehl, L. Hutin, S. Barraud and F. D. Parmentier, Phys. Rev. Lett. 121, 027701 (2018)

41. Coherent control of single electrons: a review of current progress
C. Bauerle, D. C. Glattli, T. Meunier, F. Portier, P. Roche, P. Roulleau, S. Takada and X. Waintal
Reports on progress on physics 81, 056503 (2018)

40. Emission of Nonclassical Radiation by Inelastic Cooper Pair Tunneling
M. Westig, B. Kubala, O. Parlavecchio, Y. Mukharsky, C. Altimiras, P. Joyez, D. Vion, P. Roche, D. Esteve, M. Hofheinz, M. Trif, P. Simon, J. Ankerhold and F. Portier
Phys. Rev. Lett. 119, 137001 (2017)

39. Robust quantum coherence above the Fermi sea
S. Tewari, P. Roulleau, C. Grenier, F. Portier, A. Cavanna, U. Gennser, D. Mailly, and P. Roche
Phys. Rev. B 93, 035420 (2016)

38. Fluctuation-Dissipation Relations of a Tunnel Junction Driven by a Quantum Circuit
O. Parlavecchio, C. Altimiras, J-R. Souquet, P.Simon, I. Safi, P. Joyez, D. Vion, P. Roche, D. Esteve, and F. Portier
Phys. Rev. Lett. **114**, 126801 (2015)

37. Dynamical Coulomb Blockade of Shot Noise
C. Altimiras, O. Parlavecchio, P. Joyez, D. Vion, P. Roche, D. Esteve, and F. Portier
Phys. Rev. Lett. **112**, 236803 (2014)

36. Minimal-excitation states for electron quantum optics using levitons
J. Dubois, T. Jullien, F. Portier, P. Roche, A. Cavanna, Y. Jin, W. Wegscheider, P. Roulleau and D. C. Glattli, Nature 502, 659 (2013)

35. Tunable microwave impedance matching to a high impedance source using a Josephson metamaterial
C. Altimiras, O. Parlavecchio, P. Joyez, D. Vion, P. Roche, D. Esteve, and F. Portier
Appl. Phys. Lett. **103**, 212601 (2013)

34. Carrier Drift Velocity and Edge Magnetoplasmons in Graphene
I. Petković[*], F. I. B. Williams[1,3], K. Bennaceur[1,†], F. Portier[1], P. Roche[1], and D. C. Glattli[1,‡]
Phys. Rev. Lett. **110**, 016801 (2013)

33. Quantum Coherence Engineering in the Integer Quantum Hall Regime

P-A. Huynh, F. Portier, H. le Sueur, G. Faini, U. Gennser, D. Mailly, F. Pierre, W. Wegscheider, and P. Roche Phys. Rev. Lett. **108**, 256802 (2012)

32. The bright side of coulomb blockade
M. Hofheinz, F. Portier, Q. Baudouin, P. Joyez, D. Vion, P. Bertet, P. Roche, and D. Esteve
Phys. Rev. Lett. **106**, 217005 (2011)

31. Unveiling quantum Hall transport by Efros-Shklovskii to Mott variable range hopping transition with Graphene
Keyan Bennaceur, Patrice Jacques, Fabien Portier, P. Roche, D.C. Glattli
Phys. Rev. B 86, 085433 (2012)

30. Experimental Determination of the Statistics of Photons Emitted by a Tunnel Junction
E. Zakka-Bajjani et al.,
Phys. Rev. Lett. **104**, 206802 (2010)

29. Carbon Nanotubes as Cooper-Pair Beam Splitters
L. G. Herrmann et al.,
Phys. Rev. Lett. **104**, 026801 (2010)

28. Tuning Decoherence with a Voltage Probe
Roulleau P., Portier F., Roche P., et al.
Phys. Rev. Lett. **102**, 236802 (2009)

27. **A reproducible process for mesoscopic superconducting indium contacts to GaAs/AlGaAs heterostructures**
Boulay S.; Dufouleur J.; Roche P.; et al.
Journal of Applied Physics 105, 123919 (2009)

26. Noise dephasing in the edge states of the Integer Quantum Hall regime
Roulleau P., Portier F., Roche P., et al.
Phys. Rev. Lett. **101**, 186803 (2008)

25. Direct measurement of the coherence length of edge states in the integer quantum Hall regime
Roulleau P., Portier F., Roche P., et al.
Phys. Rev. Lett. **100**, 126802 (2008)

24. High visibility in an electronic Mach-Zehnder interferometer with random phase fluctuations
Roulleau P., Portier F., Glattli D. C., Roche P., et al.
Physica E **40**, 1048 (2008)

23. Observation of the eV = hv shot noise singularity in a quantum point contact
Zakka-Bajjani E., Segala J., Portier F., et al.
Physica E **40**, 1697 (2008)

22. Finite bias visibility of the electronic Mach-Zehnder interferometer
Roulleau P., Portier F., Glattli D. C., Roche P., et al.
Phys. Rev. B **76**, 161309 (2007)

21. Experimental test of the high-frequency quantum shot noise theory in a quantum point contact
Zakka-Bajjani E., Segala J., Portier F., Roche P., et al.
Phys. Rev. Lett. **99**, 236803 (2007)

20. Effect of interactions on the noise of chiral Luttinger liquid systems
Trauzettel B., Roche P., Glattli DC. and SaleurH.
Phys. Rev. B **70**, 233301 (2004)

19. Fano factor reduction on the 0.7 conductance structure of a ballistic one-dimensional wire
Roche P., Segala J., Glattli D. C., et al.
Phys. Rev. Lett. **93,** 116602 (2004)

18. Hanbury Brown-Twiss correlations to probe the population statistics of GHz photons emitted by conductors
Gabelli J., Reydellet L-H., Feve G., et al.
Phys. Rev. Lett. **93**, 056801 (2004)

17. Electron-hole quantum partition noise in a quantum point contact
Reydellet L-H., Roche P., Jin Y., et al.
Physica E **22**, 280 (2004)

16. Quantum partition noise of photon-created electron-hole pairs
Reydellet L-H., Roche P., Glattli D. C., et al.
Phys. Rev. Lett. **90**, 176803 (2003)

15. Super poissonian noise in the FQHE regime
Rodriguez V., Roche P., Glattli D. C., et al.
Physica E **12**, 88 (2002)

14. Enhanced shot noise in long quasi-diffusive S-N-S junctions
Roche P., Perrin H., Glattli D. C., et al.
Physica C **352**, 73 (2001)

13. Shot noise and the Luttinger liquid-like properties of the FQHE
Glattli D. C., Rodriguez V., Perrin H., et al.
Physica E **6**, 22 (2000)

12. Cavitation in superfluid helium-4 at low temperature
Lambare H., Roche P., Balibar S., et al.
Eur. Phys. J. B **6**, 293 (1998)

11. Quantum cavitation: a comparison between superfluid helium-4 and normal liquid helium-3
Balibar S., Caupin F., Roche P., et al.
J. Low Temp. Phys. **113**, 459 (1998)

10. Cavitation in normal liquid helium 3
Caupin F., Roche P., Marchand S., et al.
J. Low Temp. Phys. **113**, 473 (1998)

9. Cavitation in superfluid helium-4 at low temperature
Lambare H., Roche P., Balibar S., et al.
Eur. Phys. J. B **2**, 381 (1998)

8. Micrometric ripplons for structure experiment
Williams F.I.B., Roche P., Deville G.
J. Low Temp. Phys. **110**, 461 (1998)

7. Measurement of the surface tension of superfluid He-4 at low temperature by capillary wave resonances
Roche P., Deville G., Appleyard N. J., et al.
J. Low Temp. Phys. **106**, 565 (1997)

6. New measurement of the superfluid He-4 surface tension by capillary wave resonances
Deville G., Roche P., Appleyard N. J., et al.
Czech. J. Phys. **46**, 89 (1996)

5. Growth and collapse of bubbles in superfluid He-4
Roche P., Lambare H., Rolley E., et al.

Czech. J. Phys. **46**, 381 (1996)

4. Crossover from quantum to thermal cavitation in superfluid He-4
Lambare H., Roche P., Rolley E., et al.
Czech. J. Phys. **46**, 383 (1996)

3. Interpretation of the low damping of sub-thermal capillary waves (ripplons) on superfluid ^{4}He
Roche P., Roger M., Williams F.I.B.
Phys. Rev. B **53**, 2225 (1996)

2. Quantum cavitation in superfluid Helium 4
Balibar S., Guthmann C., Lambare H., et al.
J. Low Temp. Phys. **101**, 271 (1995)

1. Low damping of micron capillary waves on superfluid he-4
Roche P., Deville G., Keshishev K.O., et al.
Phys. Rev. Lett. **75**, 3316 (1995)

Actes de conférences non soumis à comité de lecture

A1. Fano factor reduction on the 0.7 structure
Roche P., Segala J., Glattli D. C., et al.
AIP Conf. Proc. 780, 417-420 (2005), in: Proceedings of the 18th International Conference on Noise and Fluctuations (ICNF 2005), Salamanca, Spain, September 19-23, 2005 (eds.: Gonzalez T., Mateos J., Pardo D.).

A2. Hanbury Brown and Twiss noise correlations to probe the statistics of GHz photons emitted by quantum conductors
Glattli D. C., Gabelli J., Reydellet L.-H., et al.
AIP Conf. Proc. 780, 466-471 (2005)
(invitation), in: Proceedings of the 18th International Conference on Noise and Fluctuations (ICNF 2005), Salamanca, Spain, September 19-23, 2005 (eds.: Gonzalez T., Mateos J., Pardo D.)

A3. Photo-Assisted Electron-Hole Partition Noise in Quantum Point Contacts
Glattli D.C., Jin Y., Reydellet L.-H., Roche P.
Proceedings of the NATO Advanced Research Workshop on Quantum Noise in Mesoscopic Physics, Delft, The Nederlands, June 2-4, 2002, NATO Science Series II Vol. 97 (2003), Nazarov Y.V., ed. (Kluwer Academic Publishers, Dordrecht)

A4. Shot Noise in the FQHE: Strong Backscattering by a Weak Impurity
Glattli D.C., Rodriguez V., Roche P., et al.,
Proceedings of the XXXVIth Rencontres de Moriond, Electronic Correlations: From Meso- to Nano-Physics, Les Arcs, France, January 20-27, 2001, Series: Moriond Workshops pp. 73-82 (2001), Martin T., Montambaux G., Tran Thanh Van J., eds.

A5. Toward Shot Noise Observation in Ballistic S-N Junctions
Glattli D.C., Perrin H., Roche P., et al.
Proceedings of the XXXIVth Rencontres de Moriond: Quantum Physics at Mesoscopic Scale, Les arcs, France, January 23-30, 1999, Glattli D.C., Sanquer M., Tran Thanh Van J., eds. (EDP Sciences, Les Ulis, France)

Sur invitation

S1. Quantum Hall effect, chiral Luttinger liquids and fractional charges
Roche P, Rodriguez V, Glattli DC
C. R. Phys. **3** , 717 (2002)