

- 6. Surface chiral superconductivity in odd-parity superconductors with magnetic impurities**
L. Chirolli,
Phys. Rev. B **102**, 094202 (2020)
- 7. Brightening odd-parity excitons in transition-metal dichalcogenides: Rashba spin-orbit interaction, skyrmions, and cavity photons**
L. Chirolli,
Phys. Rev. B **101**, 075426 (2020) .
- 8. Strain-induced bound states in transition-metal dichalcogenide bubbles**
L. Chirolli, E. Prada, F. Guinea, R. Roldán, P. San-Jose
2D Materials **6**, 025010 (2019).
- 9. Signatures of surface Majorana modes in the magnetic response of topological superconductors**
L. Chirolli, F. Guinea,
Phys. Rev. B **99**, 014506 (2019).
- 10. Magnetic Tilting and Majorana Spin Connection in topological superconductors**
L. Chirolli, F. Guinea,
Phys. Rev. B **98**, 094515 (2018).
- 11. Polariton Anomalous Hall Effect in Transition-Metal Dichalcogenides**
Á. Gutiérrez-Rubio, L. Chirolli, L. Martín-Moreno, F. J. García-Vidal, F. Guinea
Phys. Rev. Lett. **121**, 137402 (2018).
- 12. Chiral Superconductivity in Thin films of doped Bi₂Se₃**
L. Chirolli
Phys. Rev. B **98**, 014505 (2018).
- 13. Chiral Majorana Interference as a Source of Quantum Entanglement**
L. Chirolli, José Pablo Baltanás, Diego Frustaglia
Phys. Rev. B **97**, 155416 (2018)
- 14. Impurity-assisted electric control of spin-valley qubits in monolayer MoS₂**
G. Széchenyi, L. Chirolli, A. Pályi
2D Materials **5**, 035004 (2018).
- 15. Theory of 2D crystals: graphene and beyond**
R. Roldán, L. Chirolli, E. Prada, J. A. Silva-Guillen, P. San-Jose, F. Guinea
Chem. Soc. Rev. **46**, 4387 (2017).
- 16. Time-reversal and rotation symmetry breaking superconductivity in Dirac materials**
L. Chirolli, F. de Juan, F. Guinea
Phys. Rev. B (R) **95**, 201110 (2017).
- 17. Enhanced superconductivity in atomically thin TaS₂**
E. Navarro-Moratalla, J. O. Island, S. Mañas-Valero, E. Pinilla-Cienfuegos, A. Castellanos-Gómez, J. Quereda, G. Rubio-Bollinger, L. Chirolli, J. A. Silva-Guillén, N. Agraït, G. A. Steele, F. Guinea, H. S. J. van der Zant, E Coronado
Nature Comm. **7**, 11043 (2016).
- 18. Nanoscale Mach-Zehnder interferometer with spin-resolved quantum Hall edge states**
B. Karmakar, D. Venturelli, L. Chirolli, V. Giovannetti, R. Fazio, S. Roddaro, L. N. Pfeiffer, K. W. West, F. Taddei, V. Pellegrini
Phys. Rev. B **92**, 195303 (2015).
- 19. Zero-bias conductance peak in detached flakes of superconducting 2H-TaS₂ probed by scanning tunneling spectroscopy**

- J. A. Galvis, L. Chirrolli, I. Guillamon, S. Vieira, E. Navarro-Moratalla, E. Coronado, H. Suderow, F. Guinea
Phys. Rev. B **89**, 224512 (2014).
20. **Theory of integer quantum Hall polaritons in graphene**
F. M. D. Pellegrino, L. Chirrolli, R. Fazio, V. Giovannetti, M. Polini
Phys. Rev. B **89**, 165406 (2014).
21. **Interactions in electronic Mach-Zehnder interferometers with copropagating edge channels**
L. Chirrolli, F. Taddei, R. Fazio, and V. Giovannetti
Phys. Rev. Lett. **111**, 036801 (2013).
22. **Coherent edge mixing and interferometry in quantum Hall bilayers**
S. Roddaro, L. Chirrolli, F. Taddei, M. Polini, and V. Giovannetti,
Phys. Rev. B **87**, 075321 (2013).
23. **Towards an electronic interferometers based on spin-resolved quantum Hall edge states**
B. Karmakar, D. Venturelli, L. Chirrolli, F. Taddei, V. Giovannetti, R. Fazio, S. Roddaro, G. Biasiol, L. Sorba, L. N. Pfeiffer, K. W. West, V. Pellegrini, F. Beltram,
Journal of Physics: Conference Series **456**, 012019 (2013).
24. **Drude weight, cyclotron resonance, and the Dicke model of graphene cavity QED,**
L. Chirrolli, M. Polini, V. Giovannetti, A. H. MacDonald
Phys. Rev. Lett. **109**, 267404 (2012).
25. **Proposal for a Datta-Das transistor in the quantum Hall regime**
L. Chirrolli, D Venturelli, F. Taddei, R. Fazio, V. Giovannetti
Phys. Rev. B **85**, 155317 (2012).
26. **Controlled coupling of spin-resolved quantum Hall edges**
B. Karmakar, D. Venturelli, L. Chirrolli, F. Taddei, V. Giovannetti, R. Fazio, S. Roddaro, G. Biasiol, L. Sorba, V. Pellegrini, F. Beltram
Phys. Rev. Lett. **107**, 236804 (2011).
27. **Time-bin entanglement of quasi-particles in semiconductor devices,**
L. Chirrolli, V. Giovannetti, R. Fazio, V. Scarani
Phys. Rev. B **84**, 195307 (2011).
28. **Electronic implementations of interaction-free measurements**
L. Chirrolli, E. Strambini, V. Giovannetti, F. Taddei, V. Piazza, R. Fazio, F. Beltram, G. Burkard
Phys. Rev. B **82**, 045403 (2010).
29. **Superconducting resonators as beam splitters for linear-optics quantum computation,**
L. Chirrolli, G. Burkard, S. Kumar, D. P. DiVincenzo
Phys. Rev. Lett. **104**, 230502 (2010).
30. **Coherent detection of electronic dephasing,**
E. Strambini, L. Chirrolli, V. Giovannetti, F. Taddei, R. Fazio, V. Piazza, F. Beltram
Phys. Rev. Lett. **104**, 170403 (2010).
31. **Quantum non-demolition measurement of a qubit coupled to a harmonic oscillator,**
L. Chirrolli, G. Burkard,
Phys. Rev. B **80**, 184509 (2009).
32. **Decoherence in Solid State Qubits**
L. Chirrolli, G. Burkard
Advances in Physics **57**, 225 (2008).

33. **Signature of chirality in scanning-probe imaging of charge flow in graphene**
M. Braun, L. Chiroli, G. Burkard
Phys. Rev. B **77**, 115433 (2008).
34. **Full control of qubit rotations in a voltage-biased superconducting flux qubit**
L. Chiroli, G. Burkard
Phys. Rev. B **74**, 174510 (2006).