

# Curriculum Vitae – Jacob Linder

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Norwegian University of Science and Technology  
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## Education

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- 2009 **Ph.D** in theoretical physics, NTNU, Norway.  
Supervisor: Asle Sudbø. Title: *Quantum transport and proximity effects in unconventional superconducting hybrid structures*.
- 2005 **M.Sc.** (sivilingeniør) in Physics and Mathematics with specialization in theoretical physics, Norwegian University of Science and Technology

## Professional Employment

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- 2013 – present Professor of Physics, NTNU, Norway.
- 2010 – 2013 Associate Professor, NTNU, Norway.
- 2009 – 2010 Postdoctoral researcher, Norwegian University of Science and Technology.
- 2005 – 2009 Ph.D student with Prof. Asle Sudbø, Norwegian University of Science and Technology.

## Major Awards and Grants

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- 2025 PI for a FRIPRO research grant (9 mill NOK), Research Council of Norway
- 2022 Voted best lecturer by the students at the Faculty of Natural Sciences and Faculty of Information Technology and Electrical Engineering.
- 2021 Co-PI for a FRIPRO research grant (8 mill. NOK), Research Council of Norway
- 2017 PI in a Center of Excellence grant (200 mill. NOK), Research Council of Norway
- 2016 Finalist for ERC Starting Grant, European Research Council.
- 2014-2018 Outstanding Academic Fellows Programme funding (3 mill. NOK), NTNU
- 2014-2018 Single PI for Young Research Talent grant (6 mill. NOK), Research Council of Norway
- 2012-2017 Co-recipient of Strategic Institute Program grant (12 mill. NOK)
- 2012 American Physical Society Outstanding Referee, APS
- 2010-2016 Main PI for a FRIPRO research grant (7 mill. NOK), Research Council of Norway
- 2010 Yara's Birkeland Prize, national award for best Ph.D degree in physics
- 2010 National award for best Ph.D degree in the natural sciences, The Royal Norwegian Society of Sciences and Letters
- 2010 Award for best Ph.D degree in basic research, ExxonMobil Corporation
- 2009 Faculty prize for best Ph.D degree, Norwegian University of Science and Technology

## Publications

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### Peer-reviewed Scientific Articles

- 2006 – present Published 200+ papers, including 20 papers in Physical Review Letters and several papers in other reputable journals such as Reviews of Modern Physics, Physical Review X, and Science Advances. 9000+ citations with a *h*-index of 47 (Google Scholar, January 2025). These papers thematically fall into various fields of quantum condensed matter theory, including superconductivity, spintronics, and quantum transport.

### Peer-reviewed Books and Book Chapters

- 2017 Book. "Introduction to Quantum Mechanics" J. Linder, Bookboon, ISBN: 978-87-403-1814-2.
- 2017 Book. "Intermediate Quantum Mechanics" J. Linder, Bookboon, ISBN: 978-87-403-1783-1.
- 2017 Book. "Introduction to Particle Physics" J. Linder. Bookboon, ISBN: 978-87-403-1704-6.
- 2017 Book chapter. "Spin-orbit interactions, spin currents, and magnetization dynamics in superconductor/ferromagnet hybrids." J. Linder and S. Jacobsen. Published in *Superconductors at the Nanoscale: From Basic Research to Applications*, DeGruyter, 1<sup>st</sup> edition, ISBN: 978-3-11-045680-6. Editors: R. Wördenweber, V. Moshchalkov, S. Bending, and F. Tafuri.
- 2016 Book chapter. "Superconducting Order in Magnetic Heterostructures." S. Jacobsen, J. A. Ouassou, and J. Linder. Published in *Advanced Magnetic and Optical Material Book Series*, Wiley-Scrivener USA, 1<sup>st</sup> edition, ISBN: 978-1-119-24191-1.
- 2016 Book. "Introduction to Lagrangian & Hamiltonian Mechanics." J. Linder and I. H. Brevik. Bookboon, ISBN: 978-87-403-1249-2.
- 2010 Book chapter. "Interplay between Ferromagnetism and Superconductivity." J. Linder and A. Sudbø. Published in *Nanoscience and engineering in superconductivity*, Springer Verlag, 1<sup>st</sup> edition. ISBN: 978-3-642-15136-1. Editors: V. Moschalkov, R. Woerdenweber, and W. Lang.

## Invited talks

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2007-2024 Invited as speaker to around 100 conferences, workshops, universities, and institutes, such as the IEEE Magnetic Frontiers Conference, International Conference on Superconductivity and Magnetism, the VORTEX conference series, and the Moscow International Symposium and Magnetism.

## Supervision

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Postdocs Dr. Pavlo Sukhachov (Ph.D Bogolyubov Institute), 2024-2026  
Dr. Jabir Ali Ouassou (Ph.D Norwegian University of Science and Technology), 2021-2023  
Dr. Sol Jacobsen (Ph.D University of Tasmania), 2014-2018

Ph.D students Erik Hodt (M. Sc NTNU, Trondheim), 2022-present  
Johanne Tjernshaugen (M. Sc. NTNU, Trondheim), 2023-present  
Karl Hallberg (M. Sc. KTH, Stocholm), 2024-present  
  
Dr. Eirik Fyhn (M. Sc. NTNU, Trondheim), 2019-present  
Dr. Lina G. Johnsen (M. Sc. NTNU, Trondheim), 2019-present  
Dr. Eirik Erlandsen (M.Sc, NTNU, Trondheim), 2018-2022 [co-supervisor]  
Dr. Atousa Ghanbari (M.Sc IUST, Tehran), 2018-2022  
Dr. Morten Amundsen (M.Sc. NTNU, Trondheim), 2016-2020  
Dr. Øyvind Johansen (M.Sc. NTNU, Trondheim), 2016-2019 [co-supervisor]  
Dr. Vetle K. Risinggård (M.Sc. NTNU, Trondheim), 2015-2019  
Dr. Jabir Ali Ouassou (M.Sc. NTNU, Trondheim), 2015-2019  
Dr. Camilla Espedal (M.Sc. NTNU, Trondheim), 2013-2017 [co-supervisor]  
Dr. Daniele Toniolo (M.Sc. University of Padova), 2012-2015  
Dr. Iryna Kulagina (M.Sc. Donetsk National University), 2011-2015  
Dr. Mohammad Alidoust (M.Sc. University of Isfahan), 2011-2013  
Dr. Henrik Enoksen (M.Sc. NTNU, Trondheim ), 2010-2013 [co-supervisor]

Master students Supervised ~30 M.Sc students, out of which 15 continued in Ph.D positions and several won awards for best M.Sc. thesis in the natural sciences

Visitors Linde Olde Olthof, visiting Ph.D student from Cambridge, UK (2020)  
Tatsuki Hashimoto, visiting Ph.D student from Nagoya, Japan (2016)  
Gaetano Annunziata, visiting Ph.D student from Salerno, Italy (2010).

## Teaching

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2025 – present University lecturer and course responsible in “Solid State Physics, Advanced Course”, NTNU.  
2024 – present University lecturer and course responsible in “Particle Physics”, NTNU.  
2020 – 2024 University lecturer and course responsible in “Quantum field theory”, NTNU.  
2019 – 2021 University lecturer and course responsible in “Electromagnetism”, NTNU.  
2017 Published the free eBooks “Introduction to Quantum Mechanics”, “Intermediate Quantum Mechanics”, and “Introduction to Particle Physics”, Bookboon.  
2016 – present University lecturer and course responsible in “Quantum Mechanics II”, NTNU.  
2016 Published a free eBook on classical mechanics with I. H. Brevik, “Introduction to Lagrangian & Hamiltonian Mechanics”, Bookboon 1<sup>st</sup> edition, as well as a comprehensive series of YouTube-lectures on classical mechanics available freely online.  
2012 – 2015 University lecturer and course responsible in “Particle Physics”, NTNU.  
2011 – 2014 University lecturer and course responsible in “Classical Mechanics”, NTNU.  
2010 Completed PEDUP pedagogical 6-month course, NTNU.  
2005 – 2009 Teaching assistant in several lab courses on experimental physics, including mechanical physics, electromagnetism, and instrumentation/electronics.  
2000 – 2005 Teaching assistant in several undergraduate courses on quantum mechanics, mathematics, and electromagnetism.

## Professional Activities (selection)

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Refereeing Science, Reviews of Modern Physics, Physical Review Letters, Physical Review X, Physical Review B, Nature, Nature Materials, Nature Physics, Nature Communications.

Project Evaluator Reviewer for project applications for the European Research Council, US Department of Energy, National Science Foundation (USA), Deutsche Forschungsgemeinschaft (GER), Israel Science Foundation (ISR), Swiss National Science Foundation (CHE), Portuguese National Funding Agency FCT for Science, Research, and Technology (POR), Czech Science Foundation (CZE), ++

Committees/Boards	<p>Editorial Board Member of Physical Review Letters, Divisional Associate Editor (2024 – ).</p> <p>International Scientific Committee, MagTop, Institute of Physics, Polish Academy of Sciences (2023 – ).</p> <p>Deputy Director for Center of Excellence QuSpin (2023 – ).</p> <p>Editorial Board Member of Scientific Reports (2017 – 2024).</p> <p>Member of the Management Committee for COST Action MP1201 “Novel functionalities through optimized confinement of condensates and fields”, (2012 - 2017).</p> <p>Member of the Nordita Research Committee for Condensed Matter Physics, (2013 - 2017).</p> <p>Editor for Material Physics, Quantum Physics, and Atomic &amp; Nuclear Physics in the Great Norwegian Encyclopedia (2017 – present).</p> <p>Deputy Head of the Section of Theoretical Physics, NTNU (2014 – 2017).</p>
Conference Organizer	<p>Workshop <i>SUPERSPIN15: Superconducting Spintronics</i> (Trondheim, Norway). Organized together with M. Eschrig.</p> <p>Workshop <i>QuSpin 2017</i> (Trondheim, Norway). Organized together with A. Brataas, A. Sudbø, J. Wells, and S. Jacobsen.</p> <p>Workshop <i>QuSpin 2018, 2019</i> (Trondheim, Norway). Organized together with A. Brataas, A. Sudbø, J. Wells, and Karen-Elisabeth Sødahl.</p> <p>Workshop <i>QuSpin 2021, 2022, 2023, 2024</i> (Trondheim, Norway). Organized together with A. Brataas, A. Sudbø, H. Bendtman, and Karen-Elisabeth Sødahl.</p>
Elected Memberships	<p>The Royal Norwegian Society of Science and Letters (DKNVS)</p> <p>Outstanding Academic Fellows programme (NTNU)</p> <p>Norwegian Academy of the Technical Sciences (NTVA)</p>
Outreach Activities	<p>Leader of the Scientific Outreach Committee, Department of Physics, NTNU (2013-2014)</p>

## Publication list

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200+ papers, 9000+ citations, *h*-index 47 (January 2025).

### **N. H. Aase, E. Hodt, J. Linder, and A. Sudbø**

Orbital currents in lattice multiorbital systems: continuity equation, torques, and RKKY interaction  
 Phys. Rev. B 110, 104423 (2024)

### **P. Sukhachov, E. W. Hodt, and J. Linder**

Thermoelectric effect in altermagnet-superconductor junctions  
 Phys. Rev. B 110, 094508 (2024)

### **E. Hodt, C. Cirillo, A. Di Bernardo, C. Attanasio, and J. Linder**

Critical temperature of triplet superconductor-ferromagnet bilayers as a probe for pairing symmetry  
 Phys. Rev. B 110, 094512 (2024)

### **L. J. Kamra, B. Lu, J. Linder, Y. Tanaka, and N. Nagaosa**

Optical conductivity of the Majorana mode at the *s*- and *d*-wave topological superconductor edge  
 Proc. Natl. Acad. Sci 121, e2404009121 (2024)

### **E. Hodt, P. Sukhachov, and J. Linder**

Interface-induced magnetization in altermagnets and antiferromagnets  
 Phys. Rev. B 110, 054446 (2024)

### **M. Amundsen, A. Brataas, and J. Linder**

RKKY interaction in Rashba altermagnets  
 Phys. Rev. B 110, 054427 (2024)

### **C. Sun and J. Linder**

Supercurrent-induced spin switching via indirect exchange interaction  
 Phys. Rev. B 109, 214409 (2024)

### **E. Hodt and J. Linder**

Spin pumping in an altermagnet/normal metal bilayer  
 Phys. Rev. B 109, 174438 (2024)

### **L. J. Kamra and J. Linder**

Inverse spin-Hall effect and spin-swapping in spin-split superconductors

Phys. Rev. Lett. 132, 226002 (2024)

**M. Amundsen, J. Linder, J. W. A. Robinson, I. Zutic, and N. Banerjee**

Colloquium: Spin-orbit effects in superconducting hybrid structures

Rev. Mod. Phys. 96, 021003 (2024)

**H. G. Gill and J. Linder**

Superconductor-alternagnet memory functionality without stray fields

Phys. Rev. B 109, 134511 (2024)

**A. T. Bregazzi, J. A. Ouassou, A. G. T. Coveney, N. A. Stelmashenko, A. Child, A. T. N'Diaye, J. W. A. Robinson, F. K. Dejene, J. Linder, and N. Banerjee**

Enhanced triplet proximity effect in superconducting spin-orbit coupled spin valves with modified superconductor/ferromagnet interfaces

Appl. Phys. Lett. 124, 162602 (2024)

**J. A. Ouassou, T. Yokoyama, and J. Linder**

RKKY interaction in triplet superconductors: Dzyaloshinskii-Moriya-type interaction mediated by spin-polarized Cooper pairs

Phys. Rev. B 109, 174506 (2024)

**J. B. Tjernshaugen, M. Amundsen, and J. Linder**

Superconducting phase diagram and spin diode effect via spin accumulation

Phys. Rev. B 109, 094516 (2024)

**E. H. Fyhn, H. Bentmann, and J. Linder**

Barrier and finite size effects on the extension of topological surface-states into magnetic insulators

Phys. Rev. B 109, 045409 (2024)

**S. Aunsmo and J. Linder**

Converting a triplet Cooper pair supercurrent into a spin-signal

Phys. Rev. B 109, 024503 (2024)

**E. W. Hodt and J. Linder**

On-off switch and sign change for non-local diode effect in spin-valve Andreev molecules

Phys. Rev. B 108, 174502 (2023)

**C. Sun and J. Linder**

Spin pumping from a ferromagnetic insulator into an alternagnet

Phys. Rev. B 108, L140408 (2023)

**E. H. Fyhn, A. Brataas, A. Qaiumzadeh, and J. Linder**

Superconducting proximity effect and long-ranged triplets in dirty metallic antiferromagnets

Phys. Rev. Lett. 131, 076001 (2023)

**C. Sun, A. Brataas, and J. Linder**

Andreev reflection in alternagnets

Phys. Rev. B 108, 054511 (2023)

**J. A. Ouassou, A. Brataas, and J. Linder**

dc Josephson effect in alternagnets

Phys. Rev. Lett. 131, 076003 (2023)

**E. W. Hodt, J. A. Ouassou, and J. Linder**

Transient dynamics and quantum phase diagram for the square lattice Rashba-Hubbard model at arbitrary hole doping

Phys. Rev. B 107, 224427 (2023)

**C. Gonzalez-Ruano, D. Caso, J. A. Ouassou, C. Tiusan, Y. Lu, J. Linder, and F. G. Aliev**

Observation of magnetic state dependent thermoelectricity in superconducting spin valves

Phys. Rev. Lett. 130, 237001 (2023)

**E. H. Fyhn, A. Brataas, A. Qaiumzadeh, and J. Linder**

Quasiclassical theory for antiferromagnetic metals

Phys. Rev. B 107, 174503 (2023)

**C. Sun and J. Linder**

Spin-pumping from a ferromagnetic insulator to an unconventional superconductor with interfacial Andreev bound-states

Phys. Rev. B 107, 144504 (2023)

**W. M.J. van Weerdenburg, A. Kamlapure, E. H. Fyhn, X. Huang, N. P. E. van Mullekom, M. Steinbrecher, P. Krogstrup, J. Linder, and A. A. Khajetoorians**

Extreme enhancement of superconductivity in epitaxial aluminum near the monolayer limit

Sci. Adv. 9, eadf5500 (2023)

**V. Falch and J. Linder**

Giant anisotropy in the Josephson effect and switching of staggered order in antiferromagnets

Phys. Rev. B 106, 214511 (2022)

**H. Gil and J. Linder**

Effective quasiclassical models for odd-frequency superconductivity:

energy-inversion symmetry, preserved spectral weight, and Meissner response

Phys. Rev. B 106, 224506 (2022)

**J. A. Ouassou, C. González-Ruano, D. Caso, F. Aliev, and J. Linder**

Complete magnetic control over the superconducting thermoelectric effect

Phys. Rev. B 106, 094514 (2022)

**J. Linder and M. Amundsen**

Quasiclassical theory for spin-orbit coupled interfaces with spin-charge conversion

Phys. Rev. B 105, 064506 (2022)

**E. H. Fyhn and J. Linder**

Spin-orbit pumping

Phys. Rev. B 105, L020409 (2022)

**A. Ghanbari, E. Erlandsen, A. Sudbø, and J. Linder**

Going beyond the Clogston-Chandrasekhar limit in a flat-band superconductor

Phys. Rev. B 105, L060501 (2022)

**L. A. B. Olde Olthof, L. G. Johnsen, J. W. A. Robinson, and J. Linder**

Controllable enhancement of p-wave superconductivity via magnetic coupling to a conventional superconductor

Phys. Rev. Lett. 127, 267001 (2021)

**L. G. Johnsen and J. Linder**

Spin injection and spin relaxation in odd-frequency superconductors

Phys. Rev. B 104, 144513 (2021)

**L. G. Johnsen, H. T. Simensen, A. Brataas, and J. Linder**

Magnon spin current induced by triplet Cooper pair supercurrents

Phys. Rev. Lett. 127, 207001 (2021)

**H. Alpern, M. Amundsen, R. Hartmann, N. Sukenik, A. Spuri, S. Yochelis, T. Prokscha, V. Gutkin, E. Scheer, J. Linder, Z. Salman, O. Millo, Y. Paltiel, and**

**A. Di Bernardo**

Unconventional Meissner screening induced by chiral molecules in a conventional superconductor

Phys. Rev. Materials 5, 114801 (2021)

**A. Ghanbari and J. Linder**

RKKY interaction in a spin-split superconductor

Phys. Rev. B 104, 094527 (2021)

**C. González-Ruano, D. Caso, L. G. Johnsen, C. Tiusan, M. Hehn, N. Banerjee, J. Linder, and F. G. Aliev**

Superconductivity assisted change of the perpendicular magnetic anisotropy in V/MgO/Fe junctions

Sci. Rep. 11, 19041 (2021)

**A. Ghanbari, E. Erlandsen, and J. Linder**

The effect of midgap states on the magnetic exchange interaction mediated by a d-wave superconductor

Phys. Rev. B 104, 054502 (2021)

**E. H. Fyhn and J. Linder**

Spin-pumping in superconductor-antiferromagnetic insulator bilayers

Phys. Rev. B 103, 134508 (2021)

**E. H. Fyhn and J. Linder**

Temporarily enhanced superconductivity from magnetic fields

Phys. Rev. B 103, L100502 (2021)

**L. G. Johnsen, S. H. Jacobsen, and J. Linder**

Magnetic control of superconducting heterostructures using compensated antiferromagnets  
Phys. Rev. B 103, L060505 (2021)

**T. Dvir, A. Zalic, E. H. Fyhn, M. Amundsen, T. Taniguchi, K. Watanbe, J. Linder, and H. Steinberg**

Zeeman and orbital effects in planar graphene-NbSe<sub>2</sub> Josephson junctions in a parallel magnetic field  
Phys. Rev. B 103, 115401 (2021)

**A. Ghanbari, V. Risinggård, and J. Linder**

Self-consistent solution for the magnetic exchange interaction mediated by a superconductor  
Sci. Rep. 11, 5028 (2021)

**H. T. Simensen, L. G. Johnsen, J. Linder, and A. Brataas**

Spin pumping between noncollinear ferromagnetic insulators through thin superconductors  
Phys. Rev. B 103, 024524 (2021)

**M. Amundsen and J. Linder**

Spin accumulation induced by a singlet supercurrent  
Phys. Rev. B 102, 100506(R) (2020).

**L. G. Johnsen, K. Svalland, and J. Linder**

Controlling the superconducting transition by rotation of an inversion symmetry breaking axis  
Phys. Rev. Lett. 125, 107002 (2020).

**C. González-Ruano, L. G. Johnsen, D. Caso, C. Tiusan, M. Hehn, N. Banerjee, J. Linder, F. G. Aliev**

Superconductivity-induced change in magnetic anisotropy in epitaxial ferromagnet-superconductor hybrids with spin-orbit interaction  
Phys. Rev. B 102, 020405(R) (2020)

**E. H. Fyhn, M. Amundsen, A. Zalic, T. Dvir, H. Steinberg, J. Linder**

Combined Zeeman and orbital effect on the Josephson effect in rippled graphene  
Phys. Rev. B 102, 024510 (2020)

**Y. Li, M. Amado, T. Hyart, G. P. Mazur, V. Risinggård, T. Wagner, L. McKenzie Sell, G. Kimbell, J. Wunderlich, J. Linder, J. W. A. Robinson**

Transition between canted antiferromagnetic and spin-polarized ferromagnetic quantum Hall states in graphene on a ferrimagnetic insulator  
Phys. Rev. B 101, 241405(R) (2020) [Editors' Suggestion]

**J. A. Ouassou, W. Belzig, and J. Linder**

Prediction of a paramagnetic Meissner effect in voltage-biased superconductor/normal-metal bilayers  
Phys. Rev. Lett. 124, 047001 (2020).

**J. Linder and A. V. Balatsky**

Odd-frequency superconductivity  
Rev. Mod. Phys. 91, 045005 (2019)

**J. Eskilt, M. Amundsen, and N. Banerjee, and J. Linder**

Long-ranged triplet supercurrent in a single in-plane ferromagnet with spin-orbit coupled contacts to superconductors  
Phys. Rev. B 100, 224519 (2019)

**E. Fyhn and J. Linder**

Controllable Vortex Loops in Superconducting Proximity Systems  
Phys. Rev. B 100, 214503 (2019)

**E. H. Fyhn and J. Linder**

Superconducting vortices in half-metals  
Phys. Rev. B 100, 224508 (2019)

**J. A. Ouassou, J. W. A. Robinson, and J. Linder**

Controlling spin supercurrents via nonequilibrium spin injection  
Sci. Rep. 9, 12731 (2019)

**M. Amundsen and J. Linder**

Quasiclassical theory for interfaces with spin-orbit coupling  
Phys. Rev. B 100, 064502 (2019)

**J. A. Ouassou, and J. Linder**

Voltage control of superconducting exchange interaction and anomalous Josephson effect

Phys. Rev. B 99, 214513 (2019)

**V. Risinggård and J. Linder**

Direct and inverse superspin Hall effect in two-dimensional systems: Electrical detection of spin supercurrents

Phys. Rev. B 99, 174505 (2019)

**Ø. Johansen, V. Risinggård, A. Sudbø, J. Linder, and A. Brataas**

Current control of magnetism in two-dimensional Fe<sub>3</sub>GeTe<sub>2</sub>

Phys. Rev. Lett. 122, 217203 (2019)

**L. G. Johnsen, N. Banerjee, and J. Linder**

Magnetisation reorientation due to superconducting transition in heavy metal heterostructures

Phys. Rev. B 99, 134516 (2019)

**H. Hugdahl, M. Amundsen, J. Linder, and A. Sudbø**

Inverse proximity effect in an s-wave and d-wave superconductor coupled to topological insulators

Phys. Rev. B 99, 094505 (2019)

**J. A. Ouassou, and J. Linder**

Voltage-induced superconductivity in high magnetic fields

Phys. Rev. B 98, 144509 (2018)

**M. Amundsen, H. Hugdahl, A. Sudbø, and J. Linder**

Vortex spin-valve on a topological insulator

Phys. Rev. B 98, 144505 (2018)

**N. Banerjee, J. A. Ouassou, Y. Zhu, N. A. Stelmashenko, J. Linder, and M. G. Blamire**

Controlling the superconducting transition by spin-orbit coupling

Phys. Rev. B 97, 184521 (2018)

**M. Amundsen, J. A. Ouassou, and J. Linder**

Field-free nucleation of antivortices and giant vortices in non-superconducting materials

Phys. Rev. Lett. 120, 207001 (2018)

**H. T. Simensen and J. Linder**

Tunable superconducting critical temperature in ballistic hybrid structures with strong spin-orbit coupling

Phys. Rev. B 97, 054518 (2018)

**V. Risinggård, E. Tveten, A. Brataas, and J. Linder**

Equations of motion and frequency dependence of magnon-induced domain wall motion

Phys. Rev. B 96, 174441 (2017)

**S. H. Jacobsen, and J. Linder**

Quantum kinetic equations and anomalous non-equilibrium Cooper pair spin accumulation in Rashba wires with Zeeman splitting

Phys. Rev. B 96, 134513 (2017)

**T. Hashimoto, A. A. Golubov, Y. Tanaka, and J. Linder**

Tunability of Andreev levels via spin-orbit coupling in Zeeman-split Josephson junctions

Phys. Rev. B 96, 134508 (2017)

**K. Lahabi, M. Amundsen, J. A. Ouassou, E. Beukers, M. Pleijster, J. Linder, P. Alkemade, J. Aarts**

Controlling supercurrents and their spatial distribution in ferromagnets

Nat. Commun. 8, 2056 (2017)

**S. Charpentier, L. Galletti, G. Kunakova, R. Arpaia, Y. Song, R. Bahdadi, S. M. Wang, A. Kalaboukhov, E. Olsson, F. Tafuri, D. Golubev, J. Linder, T. Bauch, and F. Lombardi**

Unconventional superconductivity on the surface states of Bi<sub>2</sub>Te<sub>3</sub>

Nat. Commun. 8, 2019 (2017)

**J. A. Ouassou, A. Pal, M. G. Blamire, M. Eschrig, and J. Linder**

Triplet Cooper pairs induced in diffusive s-wave superconductors interfaced with strongly spin-polarized magnetic insulators or half-metallic ferromagnets

Sci. Rep. 7, 1932 (2017)

**M. E. Bathen and J. Linder**

Spin Seebeck effect and thermoelectric phenomena in superconducting hybrids with magnetic textures or spin-orbit coupling

Sci. Rep. 7, 41409 (2017)

**M. Amundsen, J. A. Ouassou, and J. Linder**

Analytically determined topological phase diagram of the proximity-induced gap in diffusive n-terminal Josephson junctions  
Sci. Rep. 7, 40578 (2017)

**A. Pal, J. A. Ouassou, M. Eschrig, J. Linder, M. G. Blamire**

Spectroscopic evidence of odd frequency superconducting order  
Sci. Rep. 7, 40604 (2017)

**A. Di Bernardo, O. Millo, M. Barbone, H. Alpern, Y. Kalcheim, U. Sassi, A. K. Ott, D. De Fazio, D. Yoon, M. Amado, A. C. Ferrari, J. Linder, J. W. A. Robinson**

p-wave triggered superconductivity in single layer graphene on an electron-doped oxide superconductor  
Nat. Commun. 8, 14024 (2017)

**J. Linder, M. Amundsen, and V. Risinggård**

Intrinsic Superspin Hall Current  
Phys. Rev. B 96, 094512 (2017)

**J. A. Ouassou, S. H. Jacobsen, and J. Linder**

Conservation of spin supercurrents in superconductors  
Phys. Rev. B 96, 094505 (2017)

**J. A. Ouassou and J. Linder**

Spin-switch Josephson junctions with magnetically tunable  $\sin(\delta\phi/n)$  current-phase shape  
Phys. Rev. B 96, 064516 (2017)

**M. Amundsen and J. Linder**

Supercurrent Vortex Pinball via a Triplet Cooper Pair Inverse Edelstein Effect  
Phys. Rev. B 96, 064508 (2017)

**H. G. Hugdal, J. Linder, and S. H. Jacobsen**

Quasiclassical theory for the superconducting proximity effect in Dirac materials  
Phys. Rev. B 95, 235403 (2017)

**J. Linder and T. Yokoyama**

Anisotropic Andreev reflection and Josephson effect in ballistic phosphorene  
Phys. Rev. B 95, 144515 (2017)

**V. Risinggård and J. Linder**

Universal Absence of Walker Breakdown and Linear Current-Velocity Relation via Spin-Orbit Torques in Coupled and Single Domain Wall Motion  
Phys. Rev. B 95, 134423 (2017)

**D. Kuzmanovski, J. Linder, and A. Black-Schaffer**

Quantum Ground State Control in Superconductor-Silicene Structures:  $0-\pi$  transitions,  $\Phi_0$ -junctions, and Majorana bound states  
Phys. Rev. B 94, 180505(R) (2016)

**J. Linder and M. E. Bathen**

Spin caloritronics with superconductors: Enhanced thermoelectric effects, generalized Onsager response-matrix, and thermal spin currents  
Phys. Rev. B 93, 224509 (2016)

**C. Espedal, T. Yokoyama, and J. Linder**

Anisotropic Paramagnetic Meissner Effect by Spin-Orbit Coupling  
Phys. Rev. Lett. 116, 127002 (2016)

**J. Linder and K. Halterman**

Dynamical tuning between nearly perfect reflection, absorption, and transmission of light via graphene/dielectric structures  
Sci. Rep. 6, 38141 (2016)

**J. Linder, M. Amundsen, and J. A. Ouassou**

Microwave control of the superconducting proximity effect and minigap  
Sci. Rep. 6, 38739 (2016)

**Ø. Johansen and J. Linder**

Current driven spin-orbit torque oscillator: ferromagnetic and antiferromagnetic coupling  
Sci. Rep. 6, 33845 (2016)



**V. Risinggård, I. Kulagina, and J. Linder**

Electric field control of magnon-induced magnetization dynamics in multiferroics  
Sci. Rep. 6, 31800 (2016)

**J. Linder and K. Halterman**

Graphene-based extremely wide-angle tunable metamaterial absorber  
Sci. Rep. 6, 31225 (2016)

**J. A. Ouassou, A. Di Bernardo, J. W. A. Robinson, and J. Linder**

Electric control of superconducting transition through a spin-orbit coupled interface  
Sci. Rep. 6, 29312 (2016)

**S. Jacobsen, I. Kulagina, and J. Linder**

Superconducting spin flow with spin-flip immunity using a single homogeneous ferromagnet  
Sci. Rep. 6, 23926 (2016)

**M. Amundsen and J. Linder**

General solution of 2D and 3D superconducting quasiclassical systems: coalescing vortices and nanoisland geometries  
Sci. Rep. 6, 22765 (2016)

**E. Tveten, T. Muller, J. Linder, and A. Brataas**

Intrinsic Magnetization of Antiferromagnetic Textures  
Phys. Rev. B 93, 104408 (2016)

**T. Yokoyama and J. Linder**

Josephson effect through magnetic skyrmions  
Phys. Rev. B 92, 060503(R) (2015)

**A. Di Bernardo, S. Diesch, Y. Gu, J. Linder, G. Divitini, C. Ducati, E. Scheer, M.G. Blamire, J. W. A. Robinson**

Signature of Magnetic-Dependent Gapless Odd frequency States at Superconductor/Ferromagnet Interfaces  
Nat. Commun. 6, 8053 (2015)

**J. Linder and J. W. A. Robinson**

Strong odd-frequency pairing correlations in fully gapped Zeeman-split superconductors  
Sci. Rep. 5, 15483 (2015)

**J. Linder and J. W. A. Robinson**

Superconducting Spintronics  
Nat. Phys. 11, 307 (2015)

**S. Jacobsen, J. Ouassou, and J. Linder**

Critical temperature and tunneling spectroscopy of superconductor-ferromagnet hybrids with intrinsic Rashba-Dresselhaus spin-orbit coupling  
Phys. Rev. B 92, 024510 (2015)

**A. Di Bernardo, Z. Salman, X.L. Wang, M. Amado, M. Egilmez, M.G. Flokstra, A. Suter, S. L. Lee, J. H. Zha, T. Prokscha, E. Morenzoni, M. G. Blamire, J. Linder, J.W.A. Robinson**

Intrinsic paramagnetic Meissner effect due to s-wave odd frequency superconductivity  
Phys. Rev. X 5, 041021 (2015)

**E. Folven, J. Linder, O.V. Gomonay, A. Scholl, A. Doran, A.T. Young, S.T. Retterer, V.K. Malik, T. Tybell, Y. Takamura, and J.K. Grepstad**

Controlling the switching field in nanomagnets by means of domain-engineered antiferromagnets  
Phys. Rev. B 92, 094421 (2015)

**I. Gomperud and J. Linder**

Spin supercurrent and phase-tunable triplet Cooper pairs via magnetic insulators  
Phys. Rev. B 92, 035416 (2015)

**M. Eschrig, A. Cottet, W. Belzig, and J. Linder**

General Boundary Conditions for Quasiclassical Theory of Superconductivity in the Diffusive Limit: Application to Strongly Spin-polarized Systems  
New J. Phys. 17 083037 (2015)

**S. Jacobsen and J. Linder**

Giant triplet proximity effect in  $\pi$ -biased Josephson junctions with spin-orbit coupling  
Phys. Rev. B 92, 024501 (2015)

**J. Linder and K. Halterman**

Superconducting Spintronics with Magnetic Domain Walls  
Phys. Rev. B 90, 104502 (2014)

**I. Kulagina and J. Linder**

Spin Supercurrent, Magnetization Dynamics, and Phi-State in Spin-Textured Josephson Junctions  
Phys. Rev. B 90, 054504 (2014)

**J. Linder**

Improved Domain Wall Dynamics and Magnonic Torques via Topological Insulators  
Phys. Rev. B 90, 041412(R) (2014)

**D. Toniolo and J. Linder**

Superfluid Breakdown and Multiple Roton Gaps in Spin-Orbit Coupled Bose-Einstein Condensates on an Optical Lattice  
Phys. Rev. A 89, 061605(R) (2014)

**M. Alidoust, K. Halterman, and J. Linder**

Meissner Effect Probing of Odd-Frequency Triplet Pairing in Superconducting Spin Valves  
Phys. Rev. B 89, 054508 (2014)

**J. Linder and T. Yokoyama**

Superconducting Proximity Effect in Silicene: Spin-Valley Polarized Andreev Reflection, Non-Local Transport, and Supercurrent  
Phys. Rev. B 89, 020504(R) (2014)

**H. Enoksen, J. Linder, and A. Sudbø**

Pressure-induced  $0-\pi$  transitions and supercurrent crossover in antiferromagnetic weak links  
Phys. Rev. B 88, 214512 (2013)

**J. Linder and M. Alidoust**

Asymmetric Ferromagnetic Resonance, Universal Walker Breakdown, and Counterflow Domain Wall Motion in the Presence of Multiple Spin-Orbit Torques  
Phys. Rev. B 88, 064420 (2013)

**H. Enoksen, A. Sudbø, and J. Linder**

Anomalous Domain Wall Velocity and Walker Breakdown in Hybrid Systems with Anisotropic Exchange  
Phys. Rev. B 87, 220401(R) (2013)

**M. Alidoust, K. Halterman, and J. Linder**

Singlet-Triplet Superconducting Quantum Magnetometer  
Phys. Rev. B 88, 075435 (2013)

**J. Linder**

Chirality-sensitive domain wall motion in spin-orbit coupled ferromagnets  
Phys. Rev. B 87, 054434 (2013)

**M. Alidoust and J. Linder**

$\Phi$ -State and Inverted Fraunhofer Pattern in Nonaligned Josephson Junctions  
Phys. Rev. B 87, 060503(R) (2013)

**G. Annunziata, D. Manske, and J. Linder**

Proximity effect in noncentrosymmetric superconductors  
Phys. Rev. B 86, 174514 (2012)

**J. Linder, A. Brataas, Z. Shomali, and M. Zareyan**

Spin-Transfer and Exchange Torques in Ferromagnetic Superconductors  
Phys. Rev. Lett. 109, 237206 (2012)

**J. Linder**

Reversal and Termination of Domain-Wall Motion via Magnonic Spin-Transfer Torque  
Phys. Rev. B 86, 054444 (2012)

**M. Alidoust, G. Sewell, and J. Linder**

Superconducting phase transistor in diffusive four-terminal ferromagnetic Josephson junctions  
Phys. Rev. B 85, 144520 (2012)

**H. Enoksen, J. Linder, and A. Sudbø**

Spin-flip scattering and critical currents in ballistic half-metallic d-wave Josephson junctions

Phys. Rev. B 85, 014512 (2012)

**M. Alidoust, G. Sewell, and J. Linder**

Non-Fraunhofer Interference Pattern in Inhomogeneous Ferromagnetic Josephson Junctions

Phys. Rev. Lett. 108, 037001 (2012)

**A. Black-Schaffer and J. Linder**

Majorana fermions in spin-orbit coupled ferromagnetic Josephson junctions

Phys. Rev. B 84, 180509(R) (2011)

**J. Linder**

Controllable spin-transfer torque on an antiferromagnet in a dual spin-valve

Phys. Rev. B 84, 094404 (2011)

**M. Alidoust and J. Linder**

Tunable supercurrent at the charge neutrality point via strained graphene junctions

Phys. Rev. B 84, 035407 (2011)

**A. Black-Schaffer and J. Linder**

Magnetization dynamics and Majorana fermions in ferromagnetic Josephson junctions along the quantum spin Hall edge

Phys. Rev. B 83, 220511 (2011)

**J. Linder and T. Yokoyama**

Spin-current in generic hybrid structures due to interfacial spin-orbit scattering

Phys. Rev. Lett. 106, 237201 (2011)

**G. Annunziata, H. Enoksen, J. Linder, M. Cuoco, C. Noce, and A. Sudbø**

Josephson effect in S/F/S junctions: Spin bandwidth asymmetry versus Stoner exchange

Phys. Rev. B 83, 144520 (2011)

**T. Yokoyama and J. Linder**

Anomalous magnetic transport in ferromagnetic graphene junctions

Phys. Rev. B 83, 081418 (2011)

**G. Annunziata, M. Cuoco, C. Noce, A. Sudbø, and J. Linder**

Spin-sensitive long-ranged proximity effect for triplet superconductors

Phys. Rev. B 83, 060508 (2011)

**J. Linder and T. Yokoyama**

Supercurrent-induced magnetization dynamics in a Josephson junction with two misaligned ferromagnetic layers

Phys. Rev. B 83, 012501 (2011)

**M. Alidoust and J. Linder**

Spin-triplet supercurrent through inhomogeneous ferromagnetic trilayers

Phys. Rev. B 82, 224504 (2010)

**A. Black-Schaffer and J. Linder**

Strongly anharmonic current-phase relation in ballistic graphene Josephson junctions

Phys. Rev. B 82, 184522 (2010)

**J. Linder and A. Sudbø**

Majorana fermions manifested as interface states in semiconductor hybrid structures

Phys. Rev. B 82, 085314 (2010)

**M. Alidoust, G. Rashedi, J. Linder, and A. Sudbø**

Phase-controlled proximity effect in ferromagnetic Josephson junctions: Calculation of the density of states and the electronic specific heat

Phys. Rev. B 82, 014532 (2010)

**J. Linder, A. Black-Schaffer, and A. Sudbø**

Triplet proximity effect and odd-frequency pairing in graphene

Phys. Rev. B 82, 041409 (2010)

**J. Linder and A. Sudbø**

Triplet supercurrent due to spin-active zones in a Josephson junction

Phys. Rev. B 82, 020512 (2010)

**J. Linder, A. Sudbø, T. Yokoyama, R. Grein, and M. Eschrig**

Signature of odd-frequency pairing correlations induced by a magnetic interface  
Phys. Rev. B 81, 214504 (2010)

**J. Linder, Y. Tanaka, T. Yokoyama, A. Sudbø, and N. Nagaosa**

Interplay between superconductivity and ferromagnetism on a topological insulator  
Phys. Rev. B 81, 184525 (2010)

**J. Linder, M. Cuoco, and A. Sudbø**

Spin-active interfaces and unconventional pairing in half-metal/superconductor junctions  
Phys. Rev. B 81, 174526 (2010)

**J. Linder, T. Yokoyama, and A. Sudbø**

Pure spin current generated by reflection at a normal metal/two-dimensional electron gas interface  
Phys. Rev. B 81, 075312 (2010)

**J. Linder, Y. Tanaka, T. Yokoyama, A. Sudbø, and N. Nagaosa**

Unconventional superconductivity on a topological insulator  
Phys. Rev. Lett. 104, 067001 (2010)

**J. Linder and A. Sudbø**

Probing phase separation in Bose-Fermi mixtures by the critical superfluid velocity  
Phys. Rev. A 81, 013622 (2010)

**M. Alidoust, J. Linder, G. Rashedi, T. Yokoyama, and A. Sudbø**

Spin-polarized Josephson current in superconductor/ferromagnet/superconductor junctions with inhomogeneous magnetization  
Phys. Rev. B 81, 014512 (2010)

**J. Linder, T. Yokoyama, and A. Sudbø**

Anomalous finite size effects on surface states in the topological insulator Bi<sub>2</sub>Se<sub>3</sub>  
Phys. Rev. B 80, 205401 (2009)

**I. B. Sperstad, J. Linder, and A. Sudbø**

Quantum transport in ballistic s±-wave superconductors with interband coupling: Conductance spectra, crossed Andreev reflection, and Josephson current  
Phys. Rev. B 80, 144507 (2009)

**J. Linder, A. Black-Schaffer, T. Yokoyama, S. Doniach, and A. Sudbø**

Josephson current in graphene: Role of unconventional pairing symmetries  
Phys. Rev. B 80, 094522 (2009)

**J. Linder, M. Zareyan, and A. Sudbø**

Spin-switch effect from crossed Andreev reflection in superconducting graphene spin valves  
Phys. Rev. B 80, 014513 (2009)

**J. Linder, I. B. Sperstad, and A. Sudbø**

0- $\pi$  phase shifts in Josephson junctions as a signature for the s±-wave pairing state  
Phys. Rev. B 80, 020503(R) (2009)

**J. Linder, T. Yokoyama, and A. Sudbø**

Spin-transfer torque and magnetoresistance in superconducting spin valves  
Phys. Rev. B 79, 224504 (2009)

**J. Linder and A. Sudbø**

Calculation of drag and superfluid velocity from the microscopic parameters and excitation energies of a two-component Bose-Einstein condensate on an optical lattice  
Phys. Rev. A 79, 063610 (2009)

**J. Linder, T. Yokoyama, A. Sudbø, and M. Eschrig**

Pairing symmetry conversion by spin-active interfaces in magnetic normal-metal/superconductor junctions  
Phys. Rev. Lett. 102, 107008 (2009)

**J. Linder, T. Yokoyama, and A. Sudbø**

Theory of superconducting and magnetic proximity effect in S/F structures with inhomogeneous magnetization textures and spin-active interfaces  
Phys. Rev. B 79, 054523 (2009)

**A. Cottet and J. Linder**

Superconducting/ferromagnetic diffusive bilayer with a spin-active interface: a numerical study

Phys. Rev. B 79, 054518 (2009)

**J. Linder, M. Zareyan, and A. Sudbø**

Proximity effect in ferromagnet/superconductor hybrids: From diffusive to ballistic motion

Phys. Rev. B 79, 064514 (2009)

**M. Silaev, T. Yokoyama, J. Linder, Y. Tanaka, and A. Sudbø**

Tunneling conductance and local density of states in time-reversal symmetry breaking superconductors under the influence of an external magnetic field

Phys. Rev. B 79, 054508 (2009)

**J. Linder and A. Sudbø**

Theory of Andreev reflection in junctions with iron-based High-Tc superconductors

Phys. Rev. B 79, 020501(R) (2009).

**J. Linder, A. Nevidomskyy, and A. Sudbø**

Nontrivial interplay between superconductivity and spin-orbit coupling in noncentrosymmetric ferromagnets

Phys. Rev. B 78, 172502 (2008).

**I. B. Sperstad, J. Linder, and A. Sudbø**

Josephson current in diffusive multilayer superconductor/ferromagnet/superconductor junctions

Phys. Rev. B 78, 104509 (2008).

**J. Linder, T. Yokoyama, and A. Sudbø**

Density of states near a vortex core in ferromagnetic superconductors: Application to STM measurements

Phys. Rev. B 78, 064520 (2008).

**J. Linder, T. Yokoyama, Y. Tanaka, and A. Sudbø**

Strongly spin-polarized current generated in Zeeman-split unconventional superconductors

Phys. Rev. B 78, 014516 (2008).

**J. Linder, T. Yokoyama, and A. Sudbø**

The role of interface transparency and spin-dependent scattering in diffusive ferromagnet/superconductor heterostructures

Phys. Rev. B 77, 174514 (2008).

**J. Linder, I. B. Sperstad, A. H. Nevidomskyy, M. Cuoco, and A. Sudbø**

Coexistence of itinerant ferromagnetism and a non-unitary superconducting state with line nodes: possible application to UGe<sub>2</sub>

Phys. Rev. B 77, 184511 (2008).

**J. Linder, T. Yokoyama, D. Huertas-Hernando, and A. Sudbø**

Supercurrent switch in graphene  $\pi$ -junctions

Phys. Rev. Lett. 100, 187004 (2008).

**J. Linder, T. Yokoyama, and A. Sudbø**

Identifying the odd-frequency superconducting state by a field-induced Josephson effect

Phys. Rev. B 77, 174507 (2008).

**J. Linder, T. Yokoyama, Y. Tanaka, Y. Asano and A. Sudbø**

Quantum transport in a normal metal/odd-frequency superconductor junction

Phys. Rev. B 77, 174505 (2008).

**T. Yokoyama, J. Linder, and A. Sudbø**

Heat transport by Dirac fermions in normal/superconducting graphene junctions

Phys. Rev. B 77, 132503 (2008).

**J. Linder and A. Sudbø**

Tunneling conductance in s- and d-wave superconductor-graphene junctions: Extended Blonder-Tinkham-Klapwijk formalism

Phys. Rev. B 77, 064507 (2008).

**J. Linder and A. Sudbø**

Spin-flip scattering and non-ideal interfaces in dirty ferromagnet / superconductor junctions.

Phys. Rev. B 76, 214508 (2007).

**J. Linder and A. Sudbø**

Dirac fermions and conductance oscillations in s- and d-wave

superconductor - graphene junctions. Phys. Rev. Lett. 99, 147001 (2007).

**J. Linder and A. Sudbø**

Josephson effect in thin-film superconductor/insulator/superconductor junctions with misaligned in-plane exchange fields.  
Phys. Rev. B 76, 064524 (2007).

**J. Linder and A. Sudbø**

Quantum transport in noncentrosymmetric superconductors and thermodynamics of ferromagnetic superconductors.  
Phys. Rev. B 76, 054511 (2007). Erratum: Phys. Rev. B 77, 069902 (2008)

**J. Linder and A. Sudbø**

Signatures of retroreflection and induced triplet electron-hole correlations in a ferromagnet/superconductor junction.  
Phys. Rev. B 75, 134509 (2007).

**J. Linder, M. Grønsløth, A. Sudbø**

Conductance spectra of ferromagnetic superconductors: Quantum transport in a ferromagnetic metal/non-unitary ferromagnetic superconductor  
Phys. Rev. B 75, 054518 (2007).

**J. Linder, M. Grønsløth, A. Sudbø**

Tunneling currents in ferromagnetic systems with multiple broken symmetries.  
Phys. Rev. B 75, 024508 (2007).

**M. Grønsløth, J. Linder, J.-M. Børven, A. Sudbø**

Interplay between ferromagnetism and superconductivity in tunneling currents.  
Phys. Rev. Lett. 97, 147002 (2006).

**J. Linder**

Parametric resonance for antineutrino conversions using LSND best-fit results with a 3+1 flavor scheme.  
Phys. Rev. D 74, 053001 (2006).