

DR. IR. REINOUD LAVRIJSEN

LIST OF PUBLICATIONS, PRESENTATIONS, SUPERVISED STUDENTS (AS PER JUNE 2019)

PUBLICATIONS

FIRST-AUTHOR / LAST-AUTHOR

UNDER REVIEW

- i. [Tuning magnetic chirality by dipolar interactions](#)
J. Lucassen, M.J. Meijer, F. Kloodt-Twesten, R. Frömter, O. Kurnosikov, R.A. Duine, H.J.M. Swagten, B. Koopmans, R. Lavrijsen
@Physical Review Letters (2019)
- ii. [Creep of Chiral Domain Walls](#)
D.M.F. Hartmann, R.A. Duine, M.J. Meijer, H.J.M. Swagten, R. Lavrijsen
@Physical Review Letters (2019)

PUBLISHED

1. [Optimizing propagating spin wave spectroscopy](#)
J. Lucassen, C.F. Schippers, L. Rutten, R.A. Duine, H.J.M. Swagten, B. Koopmans, R. Lavrijsen
Applied Physics Letters 115, 012403 (2019)
2. [Scanning electron microscopy with polarization analysis for multi-layered chiral spin textures](#)
J. Lucassen, F. Kloodt-Twesten, R. Frompter, H.P. Oepen, R.A. Duine, H. J. M. Swagten, B. Koopmans, R. Lavrijsen
Applied Physics Letters 111, 132403, (2017)
3. [Periodically modulated ferromagnetic waveguide claddings with perpendicular magnetic anisotropy for enhanced mode conversion](#)
Y.L.W. van Hees, J.J.G.M. van der Tol, B. Koopmans, R. Lavrijsen
IEEE Photonics Proceedings (2017)
4. [Asymmetric magnetic bubble expansion under in-plane field in Pt/Co/Pt: Effect of interface engineering](#)
R. Lavrijsen, D.M.F. Harmann, A. van den Brink, Y. Yin, M. Verheijen, B. Barcones, R.A. Duine, H. J. M. Swagten, B. Koopmans
Phys. Rev. B 91, 104414 (2015)
5. [Multi-bit operations in vertical spintronic shift registers](#)
R. Lavrijsen, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
Nanotechnology 25, 105201, (2014)
6. [Magnetic ratchet for 3-dimensional spintronics memory and logic](#)
R. Lavrijsen, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
Nature 494, 647-650, (2013)
7. [Asymmetric Pt/Co/Pt-stack induced sign-control of current-induced magnetic domain-wall creep](#)
R. Lavrijsen, P.P.J. Haazen, E. Mure, J.H. Franken, J.T. Kohlhepp, H.J.M. Swagten

- and B. Koopmans
Applied Physics Letters, **100**, 262408, (2012)
8. [Tuning the RKKY-interlayer exchange coupling between single perpendicularly magnetized CoFeB layers](#)
 R. Lavrijsen, A. Fernandez-Pacheco, D. Petit, R. Mansell, J.H. Lee, R.P. Cowburn
Applied Physics Letters, **100**, 052411, (2012)
 9. [Magnetism in \$\text{Co}_{80-x}\text{Fe}_x\text{B}_{20}\$; effect of crystallization](#)
 R. Lavrijsen, P.V. Paluskar, C.T.J. Loermans, P.A. van Kruisbergen, J.T. Kohlhepp, H.J.M. Swagten and B. Koopmans.
Journal of Applied Physics, **109**, 093905, (2011)
 10. [Enhanced -field driven domain-wall motion in Pt/Co₆₈B₃₂/Pt strips](#)
 R. Lavrijsen, J.T. Kohlhepp, H.J.M. Swagten and B. Koopmans.
Applied Physics Letters, **98**, 132502, (2011)
 11. [Fe:O:C grown by focused-electron-beam-induced deposition: magnetic and electric properties](#)
 R. Lavrijsen, R. Cordoba, F. J. Schoenaker, T. Ellis, B. Barcones-Campo, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans, J.M. De Teresa, C. Magen, M.R. Ibarra, P. Trompenaars and J.J.L. Mulders.
Nanotechnology, **22**, 025302, (2011).
 12. [Controlled domain wall injection in perpendicularly magnetized strips](#)
 R. Lavrijsen, J.H. Franken, J. T. Kohlhepp, H. J. M. Swagten, B. Koopmans
Applied Physics Letters **96**, 222502, (2010)
 13. [Reduced domain wall pinning in ultrathin Pt/Co_{100-x}B_x/Pt with perpendicular magnetic anisotropy](#)
 R. Lavrijsen, G.Malinowski, J.H. Franken, J. T. Kohlhepp, H. J. M. Swagten, B. Koopmans, M. Czapkiewicz, T. Stobiecki
Applied Physics Letters **96**, 022501, (2010)

Co-AUTHOR

PUBLISHED

14. [Structural transitions of skyrmion lattices in synthetic antiferromagnets](#)
 E. van Walsum, R.A. Duine, J. Lucassen, R. Lavrijsen, H.J.M. Swagten,
Accepted at Physical Review B (05/2019)
15. [Long-range chiral exchange interaction in synthetic antiferromagnets](#)
 D.S. Han, K. Lee, J.P. Hanke, K.W. Kim, Y. Mokrousov, W. Yoo, Y. van Hees, T.W. Kim, R. Lavrijsen, C.Y. You, H.J.M. Swagten, M.H. Jung, M. Klauui
Nature Materials, Advance online publication (2019)
16. [Investigating optically excited terahertz standing spin waves using noncollinear magnetic bilayers](#)
 M.L.M. Laliou, R. Lavrijsen, R.A. Duine, B. Koopmans
Physical Review B **99**, 184439 (2019)
17. [Boosting the Performance of WO₃/n-Si Heterostructures for Photo-electrochemical Water Splitting: from the Role of Si to Interface Engineering](#)
 Y. Zhao, G. Brocks, H. Genuit, R. Lavrijsen, M.A. Verheijen, A. Bieberle-Huetter
Advanced Energy Materials **4**, 9262–9270 (2019)

18. [Electrochemistry of Sputtered Hematite Photoanodes: A Comparison of Metallic DC versus Reactive RF Sputtering](#)
R. Sinha, R. Lavrijsen, M.A. Verheijen, E. Zoethout, H. Genuit, M.C.M. van de Sanden, A. Bieberle-Huetter
ACS Omega 4, 5, 9262-9270 (2019)
19. [Integrating all-optical switching with spintronics](#)
M.L.M. Laliu, R. Lavrijsen, B. Koopmans
Nature Communications 10, 110 (2019)
20. [Physical and chemical defects in WO₃ thin films and their impact on photoelectrochemical water splitting](#)
Y. Zhao, S. Balasubramanyam, R. Sinha, R. Lavrijsen, M.A. Verheijen, A.A. Bol, A. Bieberle-Huetter
ACS Applied Energy Materials 1, 5887-5895 (2018)
21. [Plasma radiation studies in Magnum-PSI using resistive bolometry](#)
G.G. van Eden, M.L. Reinke, S. Brons, G. van der Bijl, R. Lavrijsen, S.P. Huber, R. Perillo, M.C.M. van de Sanden, T.W. Morgan
Nuclear Fusion 58, 106006 (2018)
22. [Fabrication of Scaffold-Based 3D Magnetic Nanowires for Domain Wall Applications](#)
D. Sanz-Hernandez, R.F. Hamans, J. Osterrieth, J.W. Liao, L. Skoric, J.D. Fowlkes, P.D. Rack, A. Lippert, S.F. Lee, R. Lavrijsen, A. Fernandez-Pacheco
Nanomaterials 8-7, 483 (2018)
23. [Versatile microfluidic flow generated by moulded magnetic artificial cilia](#),
S.Z. Zhang, Y. Wang, R. Lavrijsen, P.R. Onck, J.M.J. den Toonder
Sensors and Actuators B – Chemical (2017)
24. [Chiral Magnetoresistance in Pt/Co/Pt zigzag wires](#)
Y.X. Yin, D.S. Han, J.S. Kim, R. Lavrijsen, K.J. Lee, S.W. Lee, K.W. Kim, H.W. Lee, H.J.M. Swagten, B. Koopmans
Applied Physics Letters 112, 249901, (2018)
25. [Synthesis of Ni Nanoparticles with Controllable Magnetic Properties by Atmospheric Pressure Microplasma Assisted Process](#)
L. Liu, S. Li, S.A. Starostin, R. lavrijsen, W. Wang, V. Hessel
American Society of Chemical Engineers (AIChE) (2017)
26. [Deterministic all-optical switching of synthetic ferrimagnets using single femtosecond laser pulses](#)
M.L.M. Laliu, M.J.G. Peeters, S.R.R. Haenen, R. Lavrijsen, B. Koopmans
Physical Review B, 96, 220411 (2017)
27. [Sputter grown Fe and Cr/Fe multilayers with fourfold magnetic anisotropy on GaAs](#),
R.H. Mansell, D.C.M.C. Petit, A. Fernandez-Pacheco, R. Lavrijsen, J.H. Lee, R.P. Cowburn
IEEE transactions on magnetics, 54 2000105 (2018)
28. [Thickness dependence of unidirectional spin-Hall magnetoresistance in metallic bilayers](#)
Y. Yin, D.-S. Han, M.C.H. de Jong, R. Lavrijsen, R.A. Duine, H.J.M. Swagten, Bert

Koopmans

Applied Physics Letters, **111**, 232405 (2017)

29. [Fabrication, Detection, and Operation of a Three-Dimensional Nanomagnetic Conduit](#), D. Sanz-Hernández, R.F. Hamans, J.-W. Liao, A. Welbourne, R. Lavrijsen, and Amalio Fernández-Pacheco
ACS Nano (2017)
30. [Visible-light-promoted gas-phase water splitting using porous WO₃/BiVO₄ photoanodes](#)
T. Stoll, G. Zafeiropoulos, I. Dogan, H. Genuit, R. Lavrijsen, B. Koopmans, M.N. Tsampas
Electrochemistry Communications **82**, 47-51, (2017)
31. [Nanostructuring of iron thin films by high flux low energy helium plasma](#)
A. Bieberle-Hutter, I. Tanyeli, R. Lavrijsen, B. Koopmans, R. Sinha, M.C.M. van de Sanden
Thin Solid Films **631**, 50-56, (2017)
32. [Vector magnetometry of Fe/Cr/Fe trilayers with biquadratic coupling](#)
R. Mansell, D.C.M.C. Petit, A. Fernandez-Pacheco, J.H. Lee, S.L. Chin, R. Lavrijsen, R.P. Cowburn
Journal of Physics D-Applied Physics **50**, 19LT02, (2017)
33. [Zigzag Domain Wall Mediated Reversal in Antiferromagnetically Coupled Layers](#)
R. Mansell, A. Fernandez-Pacheco, D.C.M.C. Petit, N.J. Steinke, J.H. Lee, R. Lavrijsen, R.P. Cowburn
IEEE Magnetism Letters **8**, 4102304, (2017)
34. [Chiral Magnetoresistance in Pt/Co/Pt zigzag wires](#)
Y. Yin, D-S. Han, J-S. Kim, R. Lavrijsen, K-J. Lee, S-W. Lee, K-W. Kim, H-W. Lee, H.J.M. Swagten, B. Koopmans
Applied Physics Letters **110**, 122401, (2017)
35. [Systematic layer-by-layer characterisation of multilayers for three-dimensional data storage and logic](#)
D. Petit, R. Lavrijsen, J. H. Lee, R. Mansell, A. Fernandez-Pacheco, R. P. Cowburn
Nanotechnology **27**, 155203, (2016)
36. [Thickness dependence of the interfacial Dzyaloshinskii-Moriya interaction in inversion symmetry broken systems](#)
J. Cho, N-H. Kim, S. Lee, J-S. Kim, R. Lavrijsen, A. Solignac, Y. Yin, D-S. Han, N. J. J. van Hoof, H. J. M. Swagten, B. Koopmans, C-Y. You
Nature Communications **6**, 7635, (2015)
37. [A robust soliton ratchet using combined antiferromagnetic and ferromagnetic interlayer couplings](#)
R. Mansell, R. Lavrijsen, A. Fernandez-Pacheco, D. C. M. C. Petit, J. H. Lee, B. Koopmans, H. J. M. Swagten, R. P. Cowburn
Applied Physics Letters **106**, 092404, (2015)
38. [Magnetic properties and interlayer coupling of epitaxial Co/Cu films on Si](#)
R. Mansell, D. Petit, A. Fernandez-Pacheco, R. Lavrijsen, J.H. Lee, R. P. Cowburn
Journal of Applied Physics, **116**, 063906, (2014)
39. [Soliton propagation in micron-sized magnetic ratchet elements](#)
J.-H. Lee, D. Petit, R. Lavrijsen, A. Fernandez-Pacheco, R. Mansell, R.P. Cowburn
Applied Physics Letters, **104**, 232404, (2014)

40. [Beam-Induced Fe Nanopillars as Tunable Domain-Wall pinning Sites](#)
J.H. Franken, M.A.J. van der Heijden, T.H. Ellis, R. Lavrijsen, C. Daniels, D. McGrouther, H.J.M. Swagten, B. Koopmans
Advanced Functional Materials **24**, *23*, 3508-3514, (2014)
41. [Domain Imaging during soliton propagation in a 3D magnetic ratchet](#)
J.-H. Lee, R. Mansell, D. Petit, A. Fernandez-Pacheco, R. Lavrijsen, R. P. Cowburn
SPIN, Vol 3, No. 4, 134001, (2013)
42. [Domain wall depinning governed by the spin Hall effect](#)
P.P.J. Haazen, E. Mure, J.H. Franken, R. Lavrijsen, H.J.M. Swagten, B. Koopmans
Nature Materials **12**, 299-303, (2013)
43. [Magnetic states in low-pinning high-anisotropy magnetic nanostructures suitable for dynamic imaging](#)
F. Buttner, C. Moutafis, A. Bisig, P. Wohlhuter, C.M. Gunther, J. Mohanty, J. Guilhufe, M. Schneider, C.V. Schmising, S. Schaffert, B. Pfau, M. Hantschmann, M. Riemeier, M. Emmel, S. Finizio, G. Jakob, M. Weigand, J. Rhensius, J.H. Franken, R. Lavrijsen, H.J.M Swagten, H. Stoll, S. Eisebitt, M. Klau
Physical Review B, **87**, 134422, (2013)
44. [Controllable nucleation and propagation of topological magnetic solitons in CoFeB/Ru ferrimagnetic superlattices](#)
A. Fernandez-Pacheco, D. Petit, R. Mansell, R. Lavrijsen, J.H. Lee, R.P. Cowburn
Physical Review B, **86**, 104422, (2012)
45. [Giant anomalous Hall effect in Fe-based microwires grown by focused-electron-beam-induced deposition](#)
R. Cordoba, R. Lavrijsen, A. Fernandez-Pacheco, M.R. Ibarra, F. J. Schoenaker, T. Ellis, B. Barcones-Campo, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans, J.J.L. Mulders and J.M. De Teresa
Journal of Physics D: Applied Physics. **45**, 035001, (2012)
46. [Domain-Wall pinning by local control of anisotropy in Pt/Co/Pt strips](#)
J.H. Franken, M. Hoeijmakers, R. Lavrijsen, H.J.M. Swagten
Journal of Physics: Condensed matter, **24**, 024216, (2012)
47. [Precise control of domain wall injection and pinning using helium and gallium focused ion beams](#)
J.H. Franken, M. Hoeijmakers, R. Lavrijsen, J. T. Kohlhepp, H. J. M. Swagten, B. Koopmans
Journal of Applied Physics, **109**, 07D504, (2011)
48. [Tunable magnetic domain wall oscillator at an anisotropy boundary](#)
J.H. Franken, R. Lavrijsen, J. T. Kohlhepp, H. J. M. Swagten, B. Koopmans
Applied Physics Letters, **98**, 102512, (2011)
49. [Spin motive forces due to magnetic vortices and domain walls](#)
M.E. Lucassen, G.C.F.L. Kruis, R. Lavrijsen, H.J.M. Swagten, B. Koopmans and R.A. Duine
Physical Review B, **84**, 014414 (2011)
50. [Correlation between Magnetism and Spin-Dependent Transport in CoFeB Alloys](#)
P.V. Paluskar, R. Lavrijsen, M. Sicot, J. T. Kohlhepp, H.J.M. Swagten, and B. Koopmans
Physical Review Letters **102**, 016602 (2009)
51. [Magnetization Dynamics and Gilbert damping in ultrathin Co₄₈Fe₃₂B₂₀ films with out-of-plane anisotropy](#)

G. Malinowski, K.C. Kuiper, R. Lavrijsen, H.J.M. Swagten, B. Koopmans
Applied Physics Letters **94**, 102501 (2009)

52. [Tunneling spin polarization and annealing of Co₇₂Fe₈B₂₀](#)

H.J.M. Swagten, P.V. Paluskar, R. Lavrijsen, J.T. Kohlhepp, B. Koopmans
Journal of Magnetism and Magnetic Materials **310** (2, Pt. 3), 2012-2014 (2007)

PRESENTATIONS

- i. **Ferrimagnetic Co/Gd bilayers for combining All-Optical-Switching and Spintronics,**
R. Lavrijsen, M. Peeters, M.L.M. Lalieu, Y. van Hees, K. Poissonnier, B. Koopmans
10th International Symposium on Metallic Multilayers, Madrid, Spain
(June 2019)
- ii. **(Invited) All-optical switching in Co/Gd bilayers and chirality determination using SEMPA,** R. Lavrijsen, et al.
M-SNOWS, Nancy, France
(September 2018)
- iii. **(Invited) On spin-orbit torques, chiral magnetization textures and e-control of magnetization in ultrathin multilayers**
R. Lavrijsen, H.J.M. Swagten, B. Koopmans
International Conference on Nanoscale Magnetism, Turkey
(September 2016) *cancelled due to political situation in Turkey*
- iv. **Manipulating the RKKY coupling strength by electric fields**
R. Lavrijsen, M. Lalieu, R. Raijmakers, H.J.M. Swagten, B. Koopmans
IEEE 2016 International Symposium On Metallic Multilayers, Uppsala, Sweden
(June 2016)
- v. **(Invited) Asymmetric exchange in Pt/Co/Ir/Pt multilayers**
R. Lavrijsen, R. Duine, H.J.M. Swagten, B. Koopmans
Wiesendanger group Symposium, Hamburg, Germany
(June 2015)
- vi. **(Invited) Domain-walls, magnetic bubbles, and the Dzyaloshinskii-Moriya interaction?**
R. Lavrijsen, D. Hartmann, R. Duine, H.J.M. Swagten, B. Koopmans
SPRING2015, Spring meeting EMRS, Lille, France
(May 2015)
- vii. **(Invited) Symmetric exchange and charging the interlayer exchange coupling**
R. Lavrijsen, D. Hartmann, R. Duine, H.J.M. Swagten, B. Koopmans
Thin Film Magnetization Group Symposium, Cambridge, UK
(March 2015)
- viii. **Tuning asymmetric exchange: towards an ideal racetrack memory?**
R. Lavrijsen, H.J.M. Swagten, B. Koopmans
COBRA symposium, TU/e, Eindhoven, The Netherlands
(February 2015)
- ix. **(Invited) Domain-wall depinning governed by the spin Hall effect and Dzyaloshinskii-Moriya interaction**
R. Lavrijsen, J.H. Franken, D. Hartmann, R. Duine, H.J.M. Swagten, B. Koopmans

- 59th Annual Magnetism & Magnetic Materials Conference, Honolulu, Hawaii
(November 2014)
- x. **(Invited) On domain-walls and spin-orbit torques**
R. Lavrijsen, H.J.M. Swagten, P.J. Haazen, E. Mure, J.H. Franken, B. Koopmans
Deutsche Physikalische Gesellschaft Spring Meeting, Dresden, Germany
(April 2014)
- xi. **On spin-orbitronics and 3D soliton ratchets**
R. Lavrijsen, H.J.M. Swagten, P.J. Haazen, E. Mure, J.H. Franken, B. Koopmans, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
Physics@FOM Meeting, Veldhoven, The Netherlands
(January 2014)
- xii. **(Invited) On spin-orbitronics, soliton ratchets and domain walls**
R. Lavrijsen; Workshop: Spintronics: Its Frontiers, Challenges and Opportunities
Nanyang Technological University Singapore, Singapore
(January 2014)
- xiii. **(Invited) Domain-wall depinning governed by the spin Hall effect**
R. Lavrijsen, H.J.M. Swagten, P.J. Haazen, E. Mure, J.H. Franken, B. Koopmans
Joint European Magnetism Symposia, Rhodes, Greece
(August 2013)
- xiv. **(Invited) Multiple soliton propagation through a magnetic superlattice**
R. Lavrijsen, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
IEEE 2013 International Symposium On Metallic Multilayers, Kyoto, Japan
(May 2013)
- xv. **(Invited) Towards fully 3-dimensional spintronics - MRAM**
R. Lavrijsen, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
IMEC, Leuven, Belgium
(December 2012)
- xvi. **3D spintronics: Perpendicularly magnetized soliton ratchet**
R. Lavrijsen, J-H. Lee, A. Fernandez-Pacheco, D. Petit, R. Mansell, R.P. Cowburn
Joint European Magnetic Symposia, Parma, Italy
(September 2012)
- xvii. **Single perpendicularly magnetized CoFeB layers for 3D spintronics**
R. Lavrijsen, A. Fernandez-Pacheco, D. Petit, J-H. Lee, R. Mansell, R.P. Cowburn
Intermag, IEEE International Magnetism Conference, Vancouver, Canada
(May 2012)
- xviii. **Domain walls in perpendicularly magnetized stripes violating spin-transfer torque?**
R. Lavrijsen, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans
55th Annual Conference on Magnetism & Magnetic Materials, Atlanta, USA
(November 2010)
- xix. **(Invited) Domain walls in perpendicularly magnetized stripes violating spin-transfer torque?**
R. Lavrijsen, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans
IEEE 2010 International Symposium On Metallic Multilayers, Berkeley, USA
(September 2010)

- xx. Perpendicular Pt / CoFeB / Pt, a tunable system for domain wall dynamics**
 R. Lavrijsen, G. Malinowski, J.T. Kohlhepp, H.J.M. Swagten, B. Koopmans
 53rd Annual Conference on Magnetism & Magnetic Materials, Austin, Texas, USA
 (November 2008)

SUPERVISION PHD STUDENTS AS CO-PROMOTOR

1. Dr. Ir. Yuxiang Yin (2018)
2. Dr. Ir. Mark Laliu (2019)
3. M.Sc. Anni Cao (Expected 2020)
4. Ir. Fanny Ummelen (Expected 2020)
5. Ir. Juriaan Lucassen (Expected 2020)
6. M.Sc. Marielle Meijer (Expected 2021)
7. M.Sc. Ece Demirer (Expected 2021)
8. Ir. Youri van Hees (Expected 2022)
9. Ir. Tom Lichtenberg (Expected 2022)
10. M.Sc. Jianing Li (Expected 2023)

SUPERVISED MASTER/BACHELOR STUDENTS

1. M.Sc. Michael Beljaars (2008), *Electron beam induced deposition of Iron*
2. B.Sc. Joris Jongen (2008), *Quantitative Magnetic Force Microscopy*
3. B.Sc. Rik Paesen (2008), *Field driven and current induced domain wall motion*
4. M.Sc. Coen Loermans (2009), *Magnetic properties of perpendicularly magnetized ultrathin Pt/CoFeB/Pt films*
5. M.Sc. Paul Janssen (2009), *The nanostencil process*
6. B.Sc. Tim Weekenstro (2009), *Ion Beam Milling*
7. B.Sc. Roger Bosch (2009), *Determination of the magnetic properties of EBID-deposited Fe nanowires through the AMR effect*
8. B.Sc. Can Avci (2009), *Magnetic characterization of Co/Pt single layer with perpendicular magnetization*
9. M.Sc. Frank Schoenaker (2010), *Exploring the fabrication of ferromagnetic nanostructures by Electron Beam Induced Deposition*
10. M.Sc. Jeroen Franken (2010), *Domain wall motion in perpendicularly magnetized ultrathin Pt/CoFeB/Pt films*
11. M.Sc. Paul Soto (2010), *Nano-stencil fabrication for spin-torque devices*
12. M.Sc. Geerit Kruis (2011), *Racing domain walls*
13. M.Sc. Tim Ellis (2011), *Novel Deposition of Magnetic Nanostructures*
14. B.Sc. Mark Laliu (2012), *Towards a working 3D data storage device*
15. B.Sc. Dion Hartmann UU (2014), *Domain-wall motion in materials with perpendicularly magnetic anisotropy*
16. M.Sc. Mark Laliu (2014), *Charging the interlayer exchange coupling*
17. M.Sc. Juriaan Lucassen (2015), *Determining the Spin Hall Effect using superconducting tunnelling spectroscopy*
18. M.Sc. Dorris Slapak (2016), *Growing BaTiO₃ for future magnetic memory devices*
19. M.Sc. Guido Hendriks (2016), *Synthetic-Multiferroic heterostructures with the Spin Hall Effect*
20. M.Sc. Pim van Nispen (2017), *Characterising the Dzyaloshinskii-Moriya effect by magnetic bubble expansion*

21. M.Sc. Rens Raijmakers (2016), *Tunable interlayer exchange coupling*
22. M.Sc. Paul de Brouwer (2017), *Tunable interlayer exchange coupling*
23. B.Sc. Jelte Schlatmann (2017) *3D vector magnet for anisotropy mapping*
24. Ext. Internship @Cambridge UK (2017), Ruben Hamans, *3D scaffolds for magnetic injection*
25. Ext. Internship @Cambridge UK (2017), Kaylee Hakkel, *Synthetic Antiferromagnets*
26. B.Sc. Amber Heskens (2018) *Theory for 3D magnonics (together with Rembert Duine)*
27. M.Sc. Youri van Hees (2018) *Magnetic claddings for photonic integrated circuits*
28. B.Sc. Jan van Mastrigt (2018) *Characterising Magnetic NanoPlatelets*
29. M.Sc. Rick Ernst (2018), *Magnetic SAF nanoparticles or bio and cancer treatment*
30. B.Sc. Huub van der Veecken (2018), *Characterising Co/Gd Ferrimagnetic systems*
31. B.Sc. Stef van den Hoek (2019), *Simulating the behaviour of synthetic anti-ferromagnetic NanoPlatelets using COMSOL*
32. Jasper van Tongeren (B.Sc. expected 2019), *Simulating the attraction and repulsion of superparamagnetic beads using thin films*
33. Floris van Riel (B.Sc. expected 2019), *MFM imaging of magnetic skyrmions*
34. Paul van de Meughevel (B.Sc. expected 2019), *Spin-current assisted All-Optical-Switching?*
35. Kenneth Poissonnier (M.Sc. expected 2019), *Co/Gd ferrimagnets for AOS*
36. Ext. Master. @AMS, Eindhoven, NL, Kelvin van Hoorn (M.Sc. expected 2019), *Magnetically functionalized pressure sensor membranes*
37. Ext. Internship @ASML, Veldhoven, NL 2019, Jan van Mastrigt; *Ultrasensitive current sensors*
38. Ext. Internship @SCIL, Eindhoven, NL 2019, Huub van der Veecken, *Characterizing the imprint wetting process*
39. Ext. Internship @MIT, Boston USA, 2019 Don van Elst, *SOT's in Co/Gd multilayers*
40. Ext. Internship @Argonne, Chicago USA, 2019 Arthur Hendriks, *MOKE using plasmonics ultrajets*
41. Gyan van der Jagt (M.Sc. Expected 2019), *Focused Ion Beam magnetic patterning for SEMPA*
42. Mark de Jong (M.Sc. expected 2020), *MFM for Skyrmion injections*