

Curriculum Vitae

Laura Filion

Personal Data

NAME Laura Christine Filion
DATE OF BIRTH December 11, 1979
PLACE OF BIRTH Sydney, Canada
CITIZENSHIP Canadian

Current Work Address

Soft Condensed Matter & Biophysics
Utrecht University
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Degrees

- 2011 **PhD (cum laude)** in Physics, Utrecht University, the Netherlands
Supervisor: Marjolein Dijkstra
Thesis: *Self-assembly in colloidal hard-sphere systems*
- 2005 **Masters** in Physics, McMaster University, Canada
Supervisor: Catherine Kallin
Thesis: *Spin waves in NaNiO_2*
- 2002 **Joint Bachelors Degree (first class honours)** in Physics and Mathematics, St. Francis Xavier University, Canada
Supervisor: David Pink

Languages

- English (mother tongue)
- French (Approximately B2 in Europe)
- Dutch (Approximately B2 in Europe)

Post Graduate Academic Positions

- Apr. 2012 – now **Assistant Professor**
Soft Condensed Matter and Biophysics, Utrecht University, The Netherlands
Tenured since 2016
- Apr. 2011 – Apr. 2012 **Postdoctoral research associate**
with Dr. Mark Miller and Prof. Daan Frenkel
Department of Chemistry, Cambridge University, United Kingdom
- Feb. 2011 – Apr. 2011 **Postdoctoral research associate**
with Prof. dr. ir. Marjolein Dijkstra
Soft Condensed Matter and Biophysics, Utrecht University, The Netherlands

Other Functions

- **Managing Director** of the **Debye Institute for Nanomaterials Science**, since September 2017
- **Member** of the **Utrecht Young Academy**, since 2016

Accepted Proposals

- **Co-proposer** for Dutch-India (NWO-DST) grant, NWO contribution: 234 keuro, 2016
- **Proposer** for NWO (Dutch Organization for Scientific Research) Veni grant, Value: 250 keuro, 2013

Outreach and Community Building

- **Public Lecture** for the **Natuurkundig Gezelschap te Utrecht** on *Machine Learning in Soft Matter*, April 2018
- **Lecture** and labtour on **Brownian Motion** for high school students as part of the *Masterclass: De confrontatie met Einstein*, Utrecht University, Yearly since 2012
- **Invited Lecture** for the **Utrecht Physics Challenge**, 2017
- **Co-author** of an invited article with Frank Smalenburg for **Nederlands Tijdschrift voor Natuurkunde (NTvN)** entitled *Wat is er nodig voor een tweede vloeistoffase in stoffen als water?* published in Feb. 2015. The NTvN is the official magazine for the Dutch organization for physics. The title of the article in English is *What is necessary for a second liquid phase in water-like systems?*
- **Supervisor** for a **Junior College Utrecht Project** (high school thesis), Utrecht University, 2014.
- **Lecture** on colloidal self-assembly to **interdisciplinary honours bachelors students**, Utrecht University, Feb. 2014.

Other Professional Activities

- **Member** of the **Dutch Chemistry Funding Agency (CW) Study Group Soft Matter** 2016-2018.
- **Jury Member** for the FOM **Projectruimte**, a Dutch scientific grant for physics.

- **Reviewer** for Nature Materials, Physical Review Letters, Physical Review E, Journal of Chemical Physics, Langmuir, Soft Matter, and Journal of Chemical Theory and Computation, among others

Education

Qualifications and Awards

- Obtained a **Basic Education Qualification** (BKO)
- Awarded the **Prize for 2nd best lecturer** for 3rd year physics courses, Utrecht University, Academic Year 2014/2015

Lecturing and Course Development

- **Lecturer** for *Advanced Statistical Mechanics*, 3rd year Physics course, Utrecht University 2016-now
- **Co-Lecturer** for *Modelling and Simulations*, Masters Physics course, Utrecht University 2016-now
- **DRSTP lecture series** on “Introduction to soft matter simulations” as part of the DRSTP Spring School, 2017
- **Co-Lecturer** for *Hydrodynamics and Transport Phenomena*, 2nd year Physics course, Utrecht University, 2015-2017
- **Lecturer** for the Debye Summer School *Nanomaterials: Science and Applications*, Utrecht University, 2014
- **Guest Lecturer** for *Structure of Matter*, 2nd year physics course, Utrecht University, 2013-2014
- **Co-Lecturer** for *Advanced Statistical Mechanics*, 3rd year Physics course, Utrecht University, 2012-2015

Committees and Organization

- **Member** of the **Programme Committee** for the DRSTP PhD school “Trends in physics”, May 2019
- **Chair** of the **Exam Assessment Committee**, report to be submitted 2019
- **Chair** of the committee examining **computational science** in the **masters curriculum**, report to be submitted 2019
- **Member** of the **Exam Assessment Committee**, report submitted 2018
- **Member** of the **Education Team Quantum and Statistical Physics**, since 2018
- **Chair** of the committee examining **computational science** in the **bachelors curriculum**, report submitted 2017
- **Bachelor Research Coordinator** for the Nanomaterials section, Utrecht University, 2014-2017
- **Tutor** for 1st year students, Utrecht University, 2014-2016
- **Member** of the **Masters Think Tank 2020**, report submitted
- **Co-organizer** for the interdisciplinary **Debye Spring School**, mandatory attendance for all PhD students between their 1st and 3rd years in the Debye Institute, to be held in the spring of 2016.

- **Co-organizer** for the interdisciplinary **Summer School on Nanomaterials**, aimed at bachelor's and master's students, to be held Aug. 2015.
- **Member** of the **PhD defence committee or reading committee** for Wiel Evers, Marjolein van der Linden, Bas Kwaadgras, and Ruben Higler.
- **Member** of the Physics@FOM Veldhoven Conference **Poster Prize** committee, 2015.

Supervision

Post Docs

Nov. 2018 - now **Berend van der Meer**

PhD students

- Sept. 2017 - now **Emanuele Boattini**
 Emanuele is exploring design rules for forming “open crystal” structures using a combination of Monte Carlo simulations and Machine Learning techniques.
- Sept. 2014 - Sept 2018 **Berend van der Meer**
 Thesis Title: Defects and diffusion in colloidal crystals
 Graduated: Sept , 2018
- Sept. 2013 - Sept 2017 **Vasileios Prymidis**
 Thesis Title: Active matter in silico: Phase behaviour of attractive, repulsive, and anisotropic self-propelled particles
 Graduated: Sept 13, 2017

Bachelor, Internship, and Masters Students

- 2018 - now **Ruud Nimour**, Masters's Research Project, Utrecht University, The Netherlands
 Project: *Nucleation of “tilted” cubes*
- 2018 - now **Meike Bos**, Masters's Research Project, Utrecht University, The Netherlands
 Project: *Phase behaviour of charged spherocylinders*
- 2018 - now **Nina Bezem**, Masters's Research Project, Utrecht University, The Netherlands
 Project: *Modelling deformable particles*
- 2019 - now **Joris Jong**, Bachelor's Research Project, Utrecht University, The Netherlands
 Project: *Defects in crystals of repulsive particles*
- 2019 - now **Frank Otto**, Bachelor's Research Project, Utrecht University, The Netherlands
 Project: *Phonons and vibrons in colloidal crystals*
- 2018/2019 **Jillis Schokking**, Bachelor's Research Project, Utrecht University, The Netherlands
 Project: *Crystal phases of polymer coated colloids in 2d, a zoo of crystals*
- 2018/2019 **Rinske Alkemade**, Bachelor's Research Project, Utrecht University, The Netherlands
 Project: *Point defects in crystals of point Yukawa particles*

- 2018 **Sandra Hollander**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Defects in hard polyhedra*
- 2016/2017 **Alexander Gabriëlse**, Master's Internship Project, Utrecht University, The Netherlands
Project: *Crystallization of nanoparticles with square-shoulder interactions*
Co-supervisors: Dr. Frank Smalenburg, Prof. Hartmut Löwen
- 2016/2017 **Michel Ram**, Master's Research Project, Utrecht University, The Netherlands
Project: *Developing neural network based order parameters for distinguishing binary crystal structures*
- 2017 **Steyn van Leeuwen**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Phase diagram of a binary system of hard spheres and hard spheres with a square well*
- 2016 **Mayke Ploeger**, Master's Research Project, Utrecht University, The Netherlands
Project: *Elastic constants in colloidal crystals with defects*
- 2015/2016 **Robin van Damme**, Master's Research Project, Utrecht University, The Netherlands
Project: *Current title: Defects in colloidal polyhedra*
Award: *Physics Department Master Thesis Prize*
- 2015/2016 **Emma Lathouwers**, Master's Research Project, Utrecht University, The Netherlands
Project: *When Memory Pays: Discord in Hidden Markov Models*
Co-supervisor: Prof. John Bechhoefer
- 2014/2015 **Jolien Marsman**, Master's Research Project, Utrecht University, The Netherlands
Project: *Modelling the Self-Assembly of Organic Molecules on a Weakly Interacting Surface*
- 2015 **Fons van der Laan**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *A mixture of active and passive attractive disks*
- 2015 **Jette van den Broeke**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Colloidal Systems of Hard "Tilted" Cubes*
- 2014 **Harmen Sielcken**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Structures in Active Lennard-Jones Systems*
- 2014 **Emma Lathouwers**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Diffusion in hard sphere interstitial solid solutions*
- 2013 **Serwan Asaad**, Bachelor's Research Project, Utrecht University, The Netherlands
Project: *Self-Assembly of Octahedral Patchy Particles*

2012/2014	<p>Sebastian Oude Voshaar, Master's Research Project, Utrecht University, The Netherlands Project: <i>Nucleation of nanoparticles in a coarse-grained fluid using OpenCL</i> Co-supervisor: Prof. Marjolein Dijkstra</p>
2011	<p>Mark Nicholson, Part 3 project, Cambridge University, United Kingdom Project: <i>Heterogeneous ice nucleation on clay surfaces</i> Co-supervisors: Prof. Daan Frenkel and Dr. Francis Pope Award: <i>Part III Chemistry 2011/12 Prize: Unilever Prize for the best Physical project</i></p>
2008/2009	<p>Bas van Oorschot, Master's Research Project, Utrecht University, The Netherlands Project: <i>Crystal prediction of hard dumbbell particles through Monte Carlo simulations</i> Co-supervisor: Prof. Marjolein Dijkstra</p>
2007/2008	<p>Daan Pelt, Bachelor's Research Project, Utrecht University, The Netherlands Project: <i>Monte Carlo pressure annealing of binary Lennard-Jones systems</i> Co-supervisor: Prof. Marjolein Dijkstra</p>

Presentations

- Lorentz Workshop: Machine Learning and Reverse Engineering for Soft Materials, Leiden, The Netherlands December 10-14, 2018
Invited Lecture: Crystals, Defects and Machine Learning
- Physics Seminar, Amsterdam, The Netherlands November 30, 2018
Invited Lecture: Defects in colloidal crystals of hard particles
- Physics Seminar, Bristol United Kingdom
November 19, 2018
Invited Lecture: Defects in colloidal crystals of hard particles
- Applied Computational Sciences (ACOS) symposium 2018, Eindhoven, The Netherlands
October 10, 2018
Invited Keynote Speaker: Machine learning in soft matter science
- Lorentz Workshop: Topology in Complex Fluids
May 22-25, 2018
Invited Speaker: Defects in simple cubic crystals of hard particles
- Theoretical Physics Seminar, Warwick United Kingdom
March 15, 2018
Invited Lecture: Defects in colloidal crystals of hard particles
- Physics@Veldhoven, Veldhoven, The Netherlands
January 23-24, 2018
Focus Session Machine Learning in Physics Lecture: Identifying crystal structures using machine learning
- CECAM workshop: Physics and Chemistry at Fluid/Fluid Interfaces, Vienna, Austria
December 11-13, 2017

Invited Lecture: Predicting phase behaviour of mixtures of active spherical particles

- CHAINS, Veldhoven, The Netherlands
December 3-5, 2017

Focus Session *Active Colloids* Lecture: Predicting phase diagrams for active particles

- CECAM workshop: Building links between experiments and computer simulations of crystallisation, Lausanne, Austria
July 12-14, 2017

Invited Lecture: Nucleation of hard spheres in and out of spherical confinement

- MSCA-PHONSI workshop, Lille, France
March 21-23, 2016

Invited Lecture: Studying colloidal self-assembly using simulations

- Middle European Cooperation in Statistical Physics Conference (MECO), Vienna, Feb. 14-17, 2016

Lecture: Fabricating large two-dimensional single colloidal crystals by doping with active particles

- 5th International Colloids Conference, Amsterdam, The Netherlands, June 21-24, 2015

Lecture: Self-assembly of active, attractive colloids in 3d

- CECAM workshop: Industrial Challenges of Crystallization, Nucleation, and Solubility: Perspectives from Industry, Experiment and Simulation, Dublin, Ireland, June 9-12, 2015

Invited Lecture: Crystal nucleation of hard-sphere systems

- Seminar, University of Twente, The Netherlands, Mar. 25, 2015

Invited Lecture: Unraveling the origin of the liquid-liquid transition in tetrahedral particles

- Soft Matter Seminar, Leiden University, The Netherlands, Dec. 4, 2015

Invited Lecture: Unraveling the origin of the liquid-liquid transition in tetrahedral particles

- Sustainability at Science and Geosciences: Common Ground in Theoretical and Modelling Approaches, Utrecht University, The Netherlands, Oct. 24, 2014

Invited Lecture: Novel phase behaviour in colloidal model systems

- ViCoM Young Researchers Meeting, Vienna University of Technology, Austria, Apr. 22-23, 2014

Invited Lecture: Novel entropy-driven phase behaviour in colloidal systems

- Theoretical Physics Colloquium, Utrecht University, The Netherlands, Nov. 21, 2012

Invited Lecture: Novel entropy-driven phase behaviour in colloidal systems

- Debye Lunch Lecture, Utrecht University, The Netherlands, Mar. 13, 2013

Invited Lecture: Vacancy stabilized crystalline order in hard cubes

- 8th Liquid Matter Conference, Vienna, Austria, Sept. 6-10, 2011

Lecture: Self-assembly of a colloidal interstitial solid solution with tunable sublattice doping

- Telluride Energy Landscapes Workshops, Telluride, United States, Aug. 1-5, 2011

Lecture: Crystal nucleation of hard spheres: A numerical study

- 8th Dutch Soft Matter Meeting, Wageningen, the Netherlands, Apr. 14, 2010

Lecture: Efficient Method for Predicting Crystal Structures: Variable Box Shape Simulations

- Debye Lunch, Utrecht University, the Netherlands, Mar. 3, 2010

Invited Lecture: Efficient Method for Predicting Crystal Structures at Finite Temperature: Variable Box Shape Simulations

- Seminar aus Theoretischer Physik, Institut für Theoretische Physik, TU Wien, Austria, July 22, 2009

Lecture: Prediction and stability analysis of binary hard-sphere crystal structures

Publication Summary

h-index (Google Scholar): 19, Total Citations > 1400

Journal	Impact Factor*	# of Articles
Nature Materials	36.5	1
Nature Physics	20.1	1
Nano Letters	13.6	1
Angewandte Chemie	11.3	1
Proceedings of the National Academy of Sciences (USA)	9.7	2
Physical Review Letters	7.5	3
Journal of Physical Chemistry C	4.8	2
Faraday Discussions	4.6	1
Soft Matter	4.0	7
Physical Review B	3.7	1
Journal of Physical Chemistry B	3.3	1
Classical and Quantum Gravity	3.2	1
Journal of Chemical Physics	3.0	12
Physical Review E	2.2	1
Food Research International	1.7	1
Molecular Physics	1.7	2

*As indicated in 2016.

Peer Reviewed Articles

1. B. van der Meer, R. van Damme, M. Dijkstra, F. Smalenburg, **L. Filion**
Revealing a Vacancy Analog of the Crowdion Interstitial in Simple Cubic Crystals
Phys. Rev. Lett. **121**, 258001 (2018).
2. J. S. van der Burgt, J. J. Geuchies, B. van der Meer, H. Vanrompay, D. Zanaga, Y. Zhang, W. Albrecht, A. V. Petukhov, **L. Filion**, S. Bals, I. Swart, D. Vanmaekelbergh
Cuboidal Supraparticles Self-Assembled from Cubic CsPbBr₃ Perovskite Nanocrystals
J. Phys. Chem. C **122**, 15706 (2018).
3. E. Boattini, M. Ram, F. Smalenburg, **L. Filion**
Neural network based order parameters for classification of binary hard-sphere crystal structures
Mol. Phys. **116**, 3066 (2018).
4. B. van der Meer, E. Lathouwers, F. Smalenburg, and **L. Filion**
Diffusion and interactions of interstitials in hard-sphere interstitial solid solutions J. Chem. Phys **147**, 234903 (2017).
5. S. Paliwal, V. Prymidis, **L. Filion**, M. Dijkstra
Non-Equilibrium Surface Tension of the Vapour-Liquid Interface of Active Lennard-Jones Particles
J. Chem. Phys **147**, 084902 (2017).
6. B. van der Meer, M. Dijkstra, **L. Filion**
Diffusion and interactions of point defects in hard-sphere crystals
J. Chem. Phys **146** 244905 (2017)

7. R. van Damme, B. van der Meer, J.J. van den Broeke, F. Smalenburg, **L. Filion**
Phase and vacancy behaviour of hard "slanted" cubes
J. Chem. Phys, **147** 124501 (2017)
8. V. Prymidis, S. Paliwal, M. Dijkstra, **L. Filion**
Vapour-Liquid Coexistence of an Active Lennard-Jones fluid
J. Chem. Phys. **145**, 124904 (2016)
9. N. A. Elbers, J. E. S. van der Hoeven, D. A. M. de Winter, C. T. W. M. Schneijdenberg, M. N. van der Linden, **L. Filion**, A. van Blaaderen
Repulsive van der Waals forces enable Pickering emulsions with non-touching colloids
Soft Matter **12**, 7265-7272 (2016).
10. V. Prymidis, S. Samin, **L. Filion**
State behaviour and dynamics of self-propelled Brownian squares: a simulation study
Soft Matter **12**, 4309-4317 (2016)
11. B van der Meer, M Dijkstra, **L. Filion**
Removing grain boundaries from three-dimensional colloidal crystals using active dopants
Soft Matter **12**, 5630-5635 (2016)
12. B. van der Meer, **L. Filion**, M. Dijkstra
Fabricating large two-dimensional single colloidal crystals by doping with active particles
Soft Matter **12**, 3406-3411 (2016)
13. J. van der Lit, J.L. Marsman, N.J. van de Heijden, S. den Hartog, P.H. Jacobse, R.S. Koster, D. Vanmaekelbergh, R.J.M.K. Gebbink, **L. Filion**, I. Swart
Modelling the Self-Assembly of Organic Molecules on Weakly Interacting Surfaces
J. Phys. Chem. C **120**, 318 (2016).
14. B. van der Meer, W. Qi, J. Sprakel, **L. Filion**, M. Dijkstra
Dynamical heterogeneities and defects in two-dimensional soft colloidal crystals
Soft Matter **11**, 9385 (2015)
15. V. Prymidis, H. Sielcken, **L. Filion**
Self-Assembly of Active Attractive Spheres
Soft Matter **11**, 4158 (2015). (Cover)
16. F. Smalenburg, **L. Filion**, F. Sciortino
Liquid-Liquid Phase Transitions in Tetrahedrally Coordinated Fluids via Wertheim Theory
J. Phys. Chem. B **119**, 9076-9083 (2015).
17. B. de Nijs, S. Dussi, F. Smalenburg, J.D. Meeldijk, D.J. Groenendijk, **L. Filion**, A. Imhof, A. van Blaaderen, M. Dijkstra
Entropy-driven formation of large icosahedral colloidal clusters by spherical confinement
Nat. Mater. **14**, 56-60 (2015).
18. T. Troppenz, **L. Filion**, R. van Roij, M. Dijkstra
Phase behaviour of polarizable colloidal hard rods in an external electric field: a simulation study
J. Chem. Phys. **141**, 154903 (2014).
19. F. Smalenburg, **L. Filion**, F. Sciortino
Erasing no-man's land by thermodynamically stabilizing the liquid-liquid transition in tetrahedral particles
Nat. Phys. **10**, 6530-657 (2014).

20. A. Kuijk, T. Troppenz, **L. Filion**, A. Imhof, R. van Roij, M. Dijkstra, A. van Blaaderen
Effect of external electric fields on the phase behavior of colloidal silica rods
Soft Matter **10**, 6249 (2014).
21. J. de Graaf, **L. Filion**, M. Marechal, R. van Roij, M. Dijkstra
Crystal-structure prediction via the Floppy-Box Monte Carlo algorithm: Method and application to hard (non)convex particles
J. Chem. Phys. **137**, 213101 (2012).
22. F. Smallenburg, **L. Filion**, M. Marechal, M. Dijkstra
Vacancy-stabilized crystalline order in hard cubes
Proc. Natl. Acad. Sci. USA **109**, 17886 (2012).
23. N. Dorsaz, **L. Filion**, F. Smallenburg, D. Frenkel
Spiers Memorial Lecture: Effect of interaction specificity on the phase behaviour of patchy particles
Farad. Discuss. **159**, 9 (2012).
24. J.A. van Meel, **L. Filion**, C. Valeriani, D. Frenkel
A parameter-free, solid-angle based, nearest-neighbor algorithm
J. Chem. Phys. **136**, 234107 (2012).
25. E. Bianchi, G. Doppelbauer, **L. Filion**, M. Dijkstra, G. Kahl
Predicting patchy particle crystals: Variable box shape simulations and evolutionary algorithms
J. Chem. Phys. **136**, 214102 (2012).
26. **L. Filion**, M. Hermes, R. Ni, E.C.M. Vermolen, A. Kuijk, C.G. Christova, J.C.P. Stiefel-hagen, T. Vissers, A. van Blaaderen, M. Dijkstra
Self-assembly of a colloidal interstitial solid solution with a tunable sublattice doping
Phys. Rev. Lett. **107**, 168302 (2011).
27. **L. Filion**, R. Ni, D. Frenkel, M. Dijkstra
Simulation of nucleation in almost hard-sphere colloids: the discrepancy between experiments and simulation persists
J. Chem. Phys. **134**, 134901 (2011).
28. R. Ni, F. Smallenburg, **L. Filion**, M. Dijkstra
Crystal nucleation in binary hard-sphere mixtures: the effect of order parameter on the cluster composition
Mol. Phys. **109**, 1213 (2011).
29. **L. Filion**, M. Hermes, R. Ni, M. Dijkstra
Crystal nucleation of hard spheres using molecular dynamics, umbrella sampling, and forward flux sampling: A comparison of simulation techniques
J. Chem. Phys. **133**, 244115 (2010).
30. W.H. Evers, B. De Nijs, **L. Filion**, S. Castillo, M. Dijkstra, D. Vanmaekelbergh
Entropy-driven formation of binary semiconductor-nanocrystal superlattices
Nano Lett. **10**, 4235 (2010).
31. **L. Filion**, M. Marechal, B. van Oorschot, D. Pelt, F. Smallenburg, M. Dijkstra
Efficient Method for Predicting Crystal Structures at Finite Temperature: Variable Box Shape Simulations
Phys. Rev. Lett. **103**, 188302 (2009). (Editor's Suggestion)
32. **L. Filion**, M. Dijkstra
Prediction of binary hard-sphere crystal structures
Phys. Rev. E **79**, 046714 (2009).

33. E.C.M. Vermolen, A. Kuijk, **L. Filion**, M. Hermes, J.H.J. Thijssen, M. Dijkstra, A. van Blaaderen
Fabrication of large binary colloidal crystals with a NaCl structure
Proc. Natl. Acad. Sci. USA **106**, 16063 (2009).
34. W.H.Evers, H. Friedrich, **L. Filion**, M. Dijkstra, D. Vanmaekelbergh
Observation of a ternary nanocrystal superlattice and its structural characterization by electron tomography
Angew. Chem. Int. Edit. **48**, 9655 (2009).
35. A. P. Hynninen, **L. Filion**, M. Dijkstra
Stability of LS and LS₂ crystal structures in binary mixtures of hard and charged spheres
J. Chem. Phys. **131**, 064902 (2009).
36. D.A. Pink, C.B. Hanna, B.E. Quinn, V. Levadny, G.L. Ryan, **L. Filion**, A.T. Paulson
Modelling electrostatic interactions in complex soft systems
Food Res. Int. **39**, 1031-1045 (2006).
37. M.J. Lewis, B.D. Gaulin, **L. Filion**, C. Kallin, A.J. Berlinsky, H.A. Dabkowska, Y. Qiu, J.R.D. Copley
Ordering and spin waves in NaNiO₂: A stacked quantum ferromagnet
Phys. Rev. B **72**, 014408 (2005).
38. R.J. van den Hoogen, **L. Filion**
Stability analysis of multiple scalar field cosmologies with matter
Class. Quantum Grav. **17**, 1815 (2000).