# Curriculum vitae

## Personal Data

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| Name and Surname: | Germano Nardini |
| Place of Birth: | Venice (Italy) |
| Date of Birth: | April 6th, 1979 |
| Nationality: | Italian |
| Email: | germano.nardini@uis.no |

## Studies and Professional Formation

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| Aug. 18 – . . . : | Associate professor, Department of Mathematics and Physics, University of Stavanger, Norway. |
| Nov. 15 – Jul. 18: | Postdoctoral position, Institute for Theoretical Physics, Universität Bern, Switzerland. |
| Nov. 13 – Oct. 15: | Postdoctoral position, DESY Theory Group, DESY-Hamburg, Germany. |
| Nov. 11 – Oct. 13: | Postdoctoral position, Fakultät für Physik, Universität Bielefeld, Germany. |
| Nov. 09 – Oct. 11: | Postdoctoral position, Service de Physique Théorique, Université Libre de Bruxelles, Belgium. |
| Sep. 04 – Jul. 09: | Ph. D. student, Institut de Fisica de Altes Energies, Universitat Autonòma de Barcelona, Spain. Supervisor: Prof. M. Quirós Carcélen. Thesis: "The light stop scenario and its strong first order phase transition". Evaluation: excellent cum laude. |
| Oct. 98 – Apr. 03: | Student, Università degli Studi di Padova, Italy. Master thesis supervisors: Prof. F. Ferruglio and Prof. A. Riotto. Master thesis: "The effect of quasi-localized fields in the Hosotani's mechanism in extradimensional theories". Evaluation: 110/110 cum laude. |

## Career breaks

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| Jan. 22 – Nov. 22: | Paternal leave with 20% working time. |

## Teaching, Schools and Professional Experience

- Invited lecturer:
  - "Stochastic background", 3h lectures in the program "Gravitational waves: a new messenger to explore the universe", Institut Henri Poincaré, Paris (France), 2021.

- "Gravitational waves", 8h lectures at the MITP 2020 school "Scattering amplitudes", Mainz (Germany), 2020 [finally cancelled].
- "Topics in Modern Cosmology", 18h lectures for a Ph.D. programme, Bern (Switzerland), 2016 (*students assessed the course as excellent, namely 5.2 over 6, with 6 being the best mark*).
- "Higgs physics, baryogenesis and inflation", 8h lectures at the UnivEarthS summer school "Phase changes and eruptions in the Universe", Santorin (Greece), 2015.

- Teaching:
  - "General Relativity and Cosmology", master course, University of Stavanger, spring terms 2019, 2020, 2021. Role: course coordinator and main lecturer.
  - "Astronomy", bachelor course, University of Stavanger, fall terms 2018, 2019. Role: course coordinator and main lecturer.
  - "Laboratories of mechanics, thermodynamics and electromagnetism", bachelor course, Universitat Autonòma de Barcelona, spring terms 2005, 2009. Role: teaching assistant.
  - "Special relativity", bachelor course, Universitat Autonòma de Barcelona, spring term 2008. Role: teaching assistant.
  - "Physics II (electromagnetism)", undergraduate course, Universitat Autonòma de Barcelona, spring term 2008. Role: teaching assistant.
  - "Physics I (classical mechanics and thermodynamcs)", bachelor course, Universitat Autonòma de Barcelona, spring terms 2006, 2007. Role: teaching assistant.

- Teaching certificates:
  - Study programme leader in the Norwegian academic system (ongoing course, certificate expected in Dec. 2022).
  - PhD-supervisor qualification in the Norwegian academic system, 2020.
  - Higher-education pedagogy qualification in the Norwegian academic system (UniPED), 2019.
  - Higher-education teaching qualification in the Norwegian system (NyTi), 2018.
  - Professorship habilitation for the French academic system, 2018.

- Management role for academic courses:
  - Course coordinator of the course "General Relativity and Cosmology", University of Stavanger, 2018 – 2022;
  - Course coordinator of the course "Astronomy", University of Stavanger, 2018 – 2020;

- Definition of the new course “Classical mechanics and field theory” in the context of the redefinition of the UiS Math&Physics study programme, University of Stavanger,2019;
- Redesigning the syllabus of the course “Astronomy” in the context of the redefinition of the Math and Physics study programme, University of Stavanger, 2019.

- Ph. D. evaluation committees:
  - Ph. D. defense of the candidate Pierre Auclair, University Paris Diderot, 21/7/2021.
  - Ph. D. defense of the candidate Sara Tähtinen, University of Helsinki, 5/12/2018;
  - Ph. D. defense of the candidate Victor Martin Lozano, Universidad Autonoma de Madrid, 16/12/2016.

- Ph. D. student supervision:
  - Divya Rani C. G. (2021–. . . ), co-supervisor.
  - Jonas Elias El Gammal (2021–. . . ), supervisor.
  - Paolo Marcoccia (2019–. . . ), supervisor.
  - Manuel Meyer (2015–2017), co-supervisor.
  - Ingo Rues (2013–2015), co-supervisor.

- Postdoc mentor:
  - Jahed Abedi (June 2021-. . . ).

- Organizer of schools, conferences and seminars:
  - “9$^{\text{th}}$ workshop of the LISA Cosmology Working Group” (online), 6 – 7 Dec. 2021 [organizer].
  - “8$^{\text{th}}$ workshop of the LISA Cosmology Working Group” (online), 15 – 17 July 2020 [organizer].
  - “7$^{\text{th}}$ workshop of the LISA Cosmology Working Group”, Padua, 23 – 27 Sep. 2019 [organizer].
  - “Sixth workshop of the LISA Cosmology Working Group”, Madrid, 14 – 18 Jan. 2019 [organizer].
  - “Stochastic background data analysis for LISA”, Madrid, 9 – 11 Jan. 2019 [organizer].
  - “Interdisciplinary approach to QCD-like composite dark matter”, Trento, 1 – 5 Oct. 2018 [organizer].
  - “Probing Baryogenesis via LHC and Gravitational Wave Signatures”, Mainz, 18 – 29 June 2018 [organizer].

- "Fifth workshop of the LISA Cosmology Working Group", Helsinki, 11 – 15 June 2018 [organizer].
- "Fourth workshop of the LISA Cosmology Working Group", Mainz, 16 – 20 Oct. 2017 [organizer].
- "School on Gravitational Waves for Cosmology and Astrophysics", Benasque, 28 May – 10 June 2017 [organizer].
- "11$^{\text{th}}$ International LISA Symposium", Zurich, 5 – 9 Sep. 2016 [advisory committee].
- "Gravitational Waves and Cosmology & 3$^{\text{rd}}$ eLISA Cosmology Working Group workshop", Hamburg, 17 – 21 Oct. 2016 [organizer].
- " Second Workshop of the eLISA Cosmology Working Group", Stavanger, 22 – 25 Sep. 2015 [organizer].
- "First Workshop of the eLISA Cosmology Working Group", CERN, 14 – 17 Apr. 2015) [organizer].
- "BSM Journal Club of the ITP group", Bern, May 2016 – present [organizer].
- "Journal Club of the HEP group", Bielefeld, Nov. 2012 – Oct. 2013 [organizer].
- "PLANCK 2008" (Barcelona, 19 – 23 May 2008) [local support].

- Referee activity:

  For journals:

  - European Physical Journal C.
  - International Journal of Modern Physics A.
  - Journal of Cosmology and Astroparticle Physics.
  - Journal of High Energy Physics.
  - Neurocomputing.
  - Physics Letter B *(awarded "one of the best referees of 2018").*
  - Physical Review D.
  - Physical Review Letter.

  For funding agencies:

  - Bijzonder Onderzoeksfonds Zelfstandig Academisch Personeel (BOFZAP) – Flemish excellence funding for tenure track and permanent positions – .
  - European Cooperation in Science and Technology (COST).
  - Royal Society – UK grants for postdoc fellowships – .
  - Science and Technology Facility Council (STFC) – UK grants for institutes (groups of around four people) – .

  - Scientific Research in Flanders (Fonds Wetenschappelijk Onderzoe) – Flemish support for small research groups (groups of around four people) – .
  - Theoretical and Computational Astrophysics Network (TCAN); National Aeronautics and Space Administration (NASA) support for large research networks (networks of around eight institutes).

- Long visiting stays (three weeks or more):
  - ICTP South American Institute for Fundamental Research, São Paolo (Brazil), 2019.
  - Institute for Astro- and Particle Physics, Munich (Germany), 2016.
  - ICTP South American Institute for Fundamental Research, São Paolo (Brazil), 2015.
  - CERN, Geneva, 2015, 2014, 2013, 2012 and 2011.
  - Kavli Institute of Theoretical Physics, S. Barbara (US), 2014.
  - International Center for Theoretical Physics, Trieste (Italy), 2012.
  - Argonne National Laboratory, Chicago (US), 2011.
  - Fermilab, Chicago (US), 2007.
  - Université Paris VI and the École Polytéchnique, Paris (France), 2006.

## Roles in the LISA consortium and further networks

- LISA consortium (about 1200 members):
  - LISA stochastic background work package (team to develop the pipelines and science interpretation for the stochastic background analyses); co-lead, 2020 – present;
  - LISA Publication and Presentation Committee (team of about 20 people developing the publication policy and supervising the official publications and presentations); member, 2018 – present;
  - LISA Science Core Group (team of about 30 people defining, prioritizing and monitoring the collaboration work packages); member, 2018 – present;
  - LISA Data Challenge Working Group (team of about 40 members providing and testing mock data); member, 2017 – present;
  - LISA Cosmology Working Group (team of about 250 members investigating the LISA discovery potential for cosmology); co-chair, 2014 – present.

- Further networks:
  - European Cooperation in Science and Technology Action "Quantum gravity phenomenology in the multi-messenger approach":
    * Management Committee (Apr. 2019 – . . . )

    - Vice-chair of the Gravitational Wave Working Group (Apr. 2019 – . . . ).
    - Member (Apr. 2019 – . . . )
  - European Cooperation in Science and Technology Action "Gravitational waves, black holes and fundamental physics":
    - Management Committee (Jan. 2018 – Oct. 2021)
    - Topic coordinator in the Astrophysics Working Group (May 2017 – Oct. 2021)
    - Member (Apr. 2017 – Oct. 2021)
  - Member of the "UniverseNet" Marie Curie Research Training Networks "UniverseNet":
    - Member (Oct. 2006 – May 2009)

## External funding and awards

- Lyse research award (annual Norwegian prize for outstanding research), 2020.
- Norwegian Research Council financial support to reduce the teaching load, about 35k€, 2020.
- ROMFORSK grant "Gravitational Wave Signals from Early Universe Phase Transitions", about 1100k€ for 36 months, 2020 - 2024.
- Seven minor grants to organize workshops (up to 40k€ each), 2015–2019.

## Outreach activities

1. "*Scientists see the first signs of a 'sea' of gravitational waves in the universe*", journal interview (link), Stavanger (Norway), 25/1/2021;
2. "*Gravitational waves*", outreach talk at the Norwegian Astronomical Society Meeting 2019, Sandnes (Norway), 19/10/2019;
3. "*Gravitational waves*", outreach talk at the Sandnes Observatory, Sandnes (Norway), 20/3/2019;
4. "*Gravitational wave physics: a biased roadmap*", outreach talk at the University of Parma, Parma (Italy), 6/6/2018;

## Talks

1. "*Science probes with LISA*", invited (online) talk at Korea Institute Advanced Study (Korea), 29/11/2022;
2. "*Testing symmetry breakings with LISA*", plenary speaker at "DISCRETE 2022", Baden-Baden (Germany), 9/11/2022;

3. "*Cosmology and Gravitational Waves*", plenary speaker at "Gravitational Waves: A New Window to the Universe", online (Marseille University), 7/7/2021;

4. "*LISA*", plenary speaker at the "2021 Meeting of the Norwegian Physical Society", online (University of Stavanger), 22/6/2021;

5. "*The LISA Cosmology Working Group*", plenary speaker at the "LISA Canada Workshop", online, 27/4/2021;

6. "*LISA Cosmology Working Group: discussion points*", invited panelist at "Topological Effects in the Standard Model: Instantons, Sphalerons and Beyond at the LHC", online (CERN), 17/12/2020;

7. "*Electroweak sphalerons: discussion points*", invited panelist at "Topological Effects in the Standard Model: Instantons, Sphalerons and Beyond at the LHC", online (CERN), 17/12/2020;

8. "*LISA data quality and format*", invited panelist to discuss the LISA collaboration's commitments to ESA and NASA, XI LISA Consortium, online (Glasgow), 7/7/2020;

9. "*From the stochastic gravitational signal to fundamental physics with LISA*", plenary talk at "ICTP-SAIFR Program on Particle Physics", Sao Paolo (Brazil), 28/11/2019;

10. "*News from LISA*", colloquium at the ICTP South American Institute for Fundamental Research, Sao Paolo (Brazil), 20/11/2019;

11. "*LISA*", invited talk at the University of Geneva, Geneva (Switzerland), 22/2/2019;

12. "*Stochastic gravitational wave backgrounds at LISA*", invited talk at the University of Zurich, Zurich (Switzerland), 25/9/2018;

13. "*LISA*", talk at "Probing Baryogenesis via LHC and Gravitational Wave Signatures", Mainz (Germany), 20/6/2018;

14. "*LISA as a probe for cosmology and particle physics*", invited talk at the University of Parma, Parma (Italy), 5/6/2018;

15. "*Probing the electroweak scale via gravitational wave experiments*", invited talk at Gravitational Wave Centre, Leuvain (Belgium), 27/3/2018;

16. "*Probing the electroweak scale via gravitational wave experiments*", colloquium at the " National Seminar Theoretical High Energy Physics", Amsterdam (Netherlands), 16/3/2018;

17. "*LISA as a probe of particle physics: a data analysis perspective*", plenary talk at "GRASS 2018", Padua (Italy), 2/2/2018;

18. "*Cosmology and cosmography of gravitational waves*", plenary talk at "Gravity@Malta 2018", Valletta (Malta), 22/1/2018;

19. "*Using gravitational waves to probe the dark sector*", plenary talk at the "Dark Matter Workshop", Louvain-la-Neuve (Belgium), 8/12/2017;

20. "*The cosmology working group: from where to where*", plenary talk at the "Full LISA Consortium meeting #1", Amsterdam (Netherlands), 19/11/2017;

21. "*Featuring stochastic gravitational wave backgrounds via a binned reconstruction*", plenary talk at the "4$^{\text{th}}$ LISA cosmology working group workshop", MITP (Germany), 15/10/2017;

22. "*LISA, a gravitational wave observatory for astrophysics, cosmology and particle physics*", colloquium at the Institute of Cosmology and Gravitation, Portsmouth (England), 13/07/2017;

23. "*Gravitational waves: a novel way to probe the universe and its particle content*", colloquium at the ShanghaiTech University, Shanghai (China), 11/03/2017;

24. "*LISA, a gravitational wave observatory for cosmology*", invited talk at the Fudan University, Shanghai (China), 8/03/2017;

25. "*LISA as a probe of the Higgs sector and TeV-scale physics*", plenary talk at "Higgs as a Probe of New Physics 2017", Toyama (Japan), 1/03/2017;

26. "*Gravitational waves from phase transitions*", plenary talk at "Gravitational Waves and Cosmology", DESY (Germany), 18/10/2016;

27. "*Probing BSM physics at eLISA*", invited talk at "TeV Particle Astrophysics", CERN (Switzerland), 13/09/2016;

28. "*Testing the third Sakharov condition via eLISA*", plenary talk at "Baryons over antibaryons: the nuclear physics of Sakharov", ECT* (Italy), 28/07/2016;

29. "*eLISA as a probe of the electroweak phase transition*", invited talk at "Strong and Electroweak Matter 2016", University of Stavanger (Norway), 14/07/2016;

30. "*eLISA for cosmology*", invited talk at CERN (Switzerland), 7/07/2016;

31. "*Probing electroweak baryogenesis at eLISA*", plenary talk at "Why is there more Matter than Antimatter in the Universe?", MIAPP (Germany), 14/06/2016;

32. "*Probing BSM Physics at eLISA*", invited talk at the Vrije Uinversity of Brussels (Belgium), 19/5/2016;

33. "*Probing First-Order Phase Transitions at eLISA*", invited talk at the University of Geneve (Switzerland), 15/4/2016;

34. "*Probing Gravitational Waves from First-Order Phase Transitions at eLISA*", invited talk at the Autonomous University of Barcelona (Spain), 29/2/2016;

35. "*Probing Phase Transitions at eLISA*", plenary talk at the "Swiss Cosmology Day 2016" (Switzerland), 12/2/2016;

36. "*Detecting Electroweak Phase Transitions at eLISA*", plenary talk at "Particle Physics at the Dawn of the LHC13" (Brazil), 13/11/2015;

37. "*Detectable Gravitational Waves from the Electroweak Phase Transition (UV perspective)*", invited talk at the "10th eLISA Symposium" (France), 13/10/2015;

38. "*Detectable gravitational waves in supersymmetric theories*", talk at "Cosmo 2015" (Poland), 9/09/2015;

39. "*Constraining dark sectors via monojet and dijet searches*", plenary talk at "LHC Physics Meeting", DESY (Germany), 13/07/2015;

40. "*Higgs phenomenology and dark matter constraints in the triplet extension of the MSSM*", invited talk at the University of Montpellier (France), 29/5/2015;

41. "*Triplet extension of the MSSM: alignment, loop-induced Higgs decays and dark matter*", invited talk at the University of Grenoble (France), 18/11/2014;

42. "*Triplet extension of the MSSM: Higgs physics and dark matter*", talk at "SUSY 2014", Manchester University (England), 24/07/2014;

43. "*Triplet extension of the MSSM*", invited talk at DESY (Germany), 7/07/2014;

44. "*Phase Transition in RS models*", plenary talk at "Particlegenesis", University of California - Santa Barbara (USA), 20/06/2014;

45. "*Higgs Sector and collider signatures in the triplet extension of the MSSM*", invited talk at the University of Helsinki (Finland), 11/03/2014;

46. "*Strong Electroweak Phase Transition in the MSSM-like Parameter Space*", plenary talk at "Non Perturbative QFT: Methods and Applications", DESY (Germany), 23/10/2013;

47. "*MSSM, Strong Phase Transition and Baryogenesis versus LHC Constraints*", invited talk at the Grappa Institute (Netherlands), 25/06/2013;

48. "*Higgs phenomenology in the triplet extension of the MSSM*", Planck 2013, ICTP (Italy), 23/05/2013;

49. "*Light Stops and Baryogenesis at* $m_h \simeq 126\ GeV$", invited talk at CERN (Switzerland), 14/12/2012;

50. "*MSSM Electroweak Baryogenesis versus LHC data*", invited talk at DESY (Germany), 26/11/2012;

51. "*LHC Data and Electroweak Baryogenesis in the MSSM*", talk at "Cosmo 2012" (China), 11/09/2012;

52. "*Electroweak Baryogenesis in the MSSM: Probing Cosmology at the LHC* ", invited talk at the University of Helsinki (Finland), 23/05/2012;

53. "*Electroweak Baryogenesis, Light Stops and LHC* ", invited talk at the Université Catholique de Louvain (Belgium), 09/05/2012;

54. "*Electroweak Baryogenesis Constraints on the Early History of the Universe*", invited talk at the University of Notre Dame (USA), 08/11/2011;

55. "*Uncertainties for a Strong Electroweak Phase Transition*", Baryogenesis and First Order Phase Transitions in the Early Universe, Lorentz Center (Netherlands), 03/09/2011;

56. "*Relaxed Bounds for Strong Electroweak Phase Transition in the MSSM* ", plenary talk at "Electroweak Baryogenesis in the Era of the LHC", Weizmann Institute of Science (Israel), 05/05/2011;

57. "*EWBG and the Effective Theory of the Light Stop Scenario*", invited talk at the Université Libre de Bruxelles (Belgium), 11/12/2009;

58. "*Electroweak Baryogenesis in the MSSM Light Stop Scenario*", Cosmo 2009, CERN (Switzerland), 07/09/2009;

59. "*Looking for Strong EW Phase Transitions*", Electroweak Phase Transition, Nordita (Sweden), 25/06/2009;

60. "*Electroweak Baryogenesis in the MSSM: Towards Higher Scales of SUSY-breaking*", plenary talk at "Baryogenesis Confronts Experiments", KICP, Chicago (USA), 7/11/2007.

61. "$B^{\pm} \to J/\psi K^{\pm}$*, comparison between TTT and muon trigger (2)* ", CDF working group, Fermilab (USA), 30/09/2002.

62. "$B^{\pm} \to J/\psi K^{\pm}$*, comparison between TTT and muon trigger*", CDF working group, Fermilab (USA), 23/09/2002.

## Publications

1. P. Auclair et al., [LISA Cosmology Working Group], *"Cosmology with the Laser Interferometer Space Antenna"*, submitted to Liv. Rev. Rel. [arXiv:2204.05434 [astro-ph.CO]].

2. A. Addazi et al., *"Quantum gravity phenomenology at the dawn of the multi-messenger era – A review"*, Prog. Part. Nucl. Phys. **125** (2022), 103948 [arXiv:2111.05659 [hep-ph]].

3. P. A. Seoane et al., *"The Effect of Mission Duration on LISA Science Objectives"*, Gen. Rel. Grav. **54** (2022) no.1, 3 [arXiv:2107.09665 [astro-ph.IM]];

4. M. Arca Sedda et al., *"The missing link in gravitational-wave astronomy: A summary of discoveries waiting in the decihertz range"*, Exper. Astron. (2021) [arXiv:2104.14583 [gr-qc]];

5. E. Megías, G. Nardini and M. Quirós, *"Radion dynamics, heavy Kaluza-Klein resonances and gravitational waves"*, Int. J. Mod. Phys. A 7 (2022) [arXiv:2103.02795 [hep-ph]];

6. R. Flauger, N. Karnesis, G. Nardini, M. Pieroni, A. Ricciardone and J. Torrado, *"Improved reconstruction of a stochastic gravitational wave background with LISA"*, JCAP **01** (2021), 059 [arXiv:2009.11845 [astro-ph.CO]];

7. P. Marcoccia, F. Fredriksson, A. B. Nielsen and G. Nardini, *"Pearson cross-correlation in the first four black hole binary mergers"*, JCAP **11** (2020), 043 [arXiv:2008.12663 [gr-qc]];

8. E. Megias, G. Nardini and M. Quiros, *"Gravitational Imprints from Heavy Kaluza-Klein Resonances"*, Phys. Rev. D **102** (2020) no.5, 055004 [arXiv:2005.04127 [hep-ph]];

9. E. Barausse et al., *"Prospects for Fundamental Physics with LISA"*, Gen. Rel. Grav. **52** (2020) no.8, 81 [arXiv:2001.09793 [gr-qc]];

10. C. Caprini, M. Hindmarsh, S. Huber, T. Konstandin, J. Kozaczuk, G. Nardini, P. Schwaller, G. Servant and D. Weir, *"Detecting gravitational waves from cosmological phase transitions with LISA: an update"*, JCAP **03** (2020), 024 [arXiv:1910.13125 [astro-ph.CO]].

11. A. Sesana et al., *"Unveiling the Gravitational Universe at μHz Frequencies"*, arXiv:1908.11391 [astro-ph.IM].

12. M. A. Sedda et al., *The Missing Link in Gravitational-Wave Astronomy: Discoveries waiting in the decihertz range"*, arXiv:1908.11375 [gr-qc].

13. C. Caprini, D. G. Figueroa, R. Flauger, G. Nardini, M. Peloso, M. Pieroni, A. Ricciardone and G. Tasinato, "Reconstructing the spectral shape of a stochastic gravitational wave background with LISA", JCAP **1911** (2019) no.11, 017 [arXiv:1906.09244 [astro-ph.CO]];

14. A. Abada *et al.* [FCC Collaboration], "FCC Physics Opportunities : Future Circular Collider Conceptual Design Report Volume 1", Eur. Phys. J. C **79** (2019) no.6, 474;

15. A. Abada *et al.* [FCC Collaboration], "FCC-ee: The Lepton Collider : Future Circular Collider Conceptual Design Report Volume 2", Eur. Phys. J. ST **228** (2019) no.2, 261;

16. A. Abada *et al.* [FCC Collaboration], "FCC-hh: The Hadron Collider : Future Circular Collider Conceptual Design Report Volume 3," Eur. Phys. J. ST **228** (2019) no.4, 755.

17. A. Abada *et al.* [FCC Collaboration], "HE-LHC: The High-Energy Large Hadron Collider," Eur. Phys. J. ST **228** (2019) no.5, 1109;

18. E. Megias, G. Nardini and M. Quiros, *"Gravitational waves and collider signatures from holographic phase transitions in soft walls"*, PoS Confinement **2018** (2018) 227 [arXiv:1811.10891 [hep-ph]].

19. D. G. Figueroa, E. Megias, G. Nardini, M. Pieroni, M. Quiros, A. Ricciardone and G. Tasinato, *"LISA as a probe for particle physics: electroweak scale tests in synergy with ground-based experiments"*, PoS (GRASS2018) 036 [arXiv:1806.06463 [astro-ph.CO]];

20. L. Barack et al., *"Black holes, gravitational waves and fundamental physics: a roadmap"*, Class. Quant. Grav. **36** (2019) no.14, 143001 [arXiv:1806.05195 [gr-qc]];

21. E. Megias, G. Nardini and M. Quiros, *"Cosmological Phase Transitions in Warped Space: Gravitational Waves and Collider Signatures"*, submitted to JHEP [arXiv: 1806.04877 [hep-ph]];

22. M. Chala, C. Krause and G. Nardini, *"Signals of the electroweak phase transition at colliders and gravitational wave observatories"*, JHEP **1807** (2018) 062 [arXiv:1802.02168 [hep-ph]];

23. N. Cornish, D. Blas and G. Nardini, *Bounding the speed of gravity with gravitational wave observations"*, Phys.Rev.Lett. 119 (2017) no.16 [arXiv:1707.06101 [hep-ph]];

24. M. Laine, M. Meyer and G. Nardini, *"Thermal phase transition with full 2-loop effective potential"*, Nucl. Phys. B **920** (2017) 565 [arXiv:1702.07479 [hep-ph]];

25. M. Chala, A. Delgado, G. Nardini and M. Quiros, *"A light sneutrino rescues the light stops"*, JHEP 1704 (2017) 097 [arXiv:1702.07359 [hep-ph]];

26. H. Audley et al., *"Laser Interferometer Space Antenna"*, arXiv:1702.00786 [astro-ph.IM] (proposal submitted to the ESA call for the L3 space mission; subsequently accepted by ESA);

27. C. Arina, M. Chala, V. Martín Lozano and G. Nardini, *"Confronting SUSY models with LHC data via electroweakino production"*, JHEP 1612 (2016) 149 [arXiv:1610.03822 [hep-ph]];

28. A. Delgado, M. Garcia-Pepin, G. Nardini and M. Quiros, *"Natural Supersymmetry from Extradimensions"*, Phys. Rev. D 94 (2016) no.9, 095017 [arXiv:1608.06470 [hep-ph]];

29. T. Golling et al., *"Physics at a 100 TeV pp collider: beyond the Standard Model phenomena"*, CERN Yellow Rep. (2017) no.3, 441 [arXiv:1606.00947 [hep-ph]].

30. M. Chala, G. Nardini and I. Sobolev, *"A Unified Explanation for Dark Matter and Electroweak Baryogenesis with direct detection and gravitational wave signatures"*, Phys. Rev. D 94 (2016) no.5, 055006 [arXiv:1605.08663 [hep-ph]];

31. S. Huber, T. Konstandin, G. Nardini and I. Rues, *"Detectable Gravitational Waves from Very Strong Phase Transitions in the General NMSSM"*, JCAP 1603 (2016) no.03, 036 [arXiv:1512.06357 [hep-ph]];

32. C. Caprini, M. Hindmarsh, S. Huber, T. Konstandin, J. Kozaczuk, G. Nardini, A. Petiteau, P. Schwaller, G. Servant and D. Weir, *"Science with the Space-Based Interferometer eLISA. II: Gravitational Waves from Cosmological Phase Transitions"*, JCAP 1604 (2016) no.04, 001 [arXiv:1512.06239 [astro-ph.CO]];

33. M. Chala, F. Kahlhoefer, M. McCullough, G. Nardini and K. Schmidt-Hoberg, *"Constraining Dark Sectors with Monojets and Dijets"*, JHEP 1507 (2015) 089 [arXiv:1503.05916 [hep-ph]];

34. I. Masina, G. Nardini and M. Quiros, *" Electroweak vacuum stability and finite quadratic radiative corrections"*, Phys. Rev. D 92 (2015) 3, 035003 [arXiv:1502.06 526 [hep-ph]];

35. T. Konstandin, G. Nardini and I. Rues, *"From Boltzmann Equations to Steady Wall Velocities"*, JCAP 1409 (2014) 028 [arXiv:1407.3132 [hep-ph]];

36. C. Arina, V. Martín Lozano and G. Nardini, *"Dark Matter versus $h \to \gamma\gamma$ and $h \to \gamma Z$ with Supersymmetric Triplets"*, JHEP 1408 (2014) 08 [arXiv:1403.6434 [hep-ph]];

37. M. Laine, G. Nardini and K. Rummukainen, *"First Order Thermal Phase Transition with 126 GeV Higgs Mass"*, PoS Lattice 2013 (2013 104) [arXiv:1311.4424 [hep-lat]];

38. A. Delgado, G. Nardini and M. Quiros, *"A Light Supersymmetric Higgs Sector Hidden by a Standard Model-like Higgs"*, JHEP 1307 (2013) 054 [arXiv:1303.0800 [hep-ph]];

39. M. Laine, G. Nardini and K. Rummukainen, *"Lattice Study of an Electroweak Phase Transition at $m_h \simeq 126$ GeV"*, JCAP 1301 (2013) 011 [arXiv:1211.7344 [hep-ph]];

40. A. Delgado, G. Nardini and M. Quiros, *"Large Diphoton Higgs Rates from Supersymmetric Triplets"*, Phys. Rev. D 86 (2012) 115010 [arXiv:1207.6596 [hep-ph]];

41. M. Carena, G. Nardini, M. Quiros and C. E. M. Wagner, *"MSSM Electroweak Baryogenesis and LHC Data"*, JHEP 1302 (2013) 001 [arXiv:1207.6330 [hep-ph]];

42. F. Capela and G. Nardini, *"Hairy Black Holes in Massive Gravity: Thermodynamics and Phase Structure"*, Phys. Rev. D 86 (2012) 024030 [arXiv:1203.4222 [gr-qc]];

43. A. Delgado, G. Nardini and M. Quiros, *"The Light Stop Scenario from Gauge Mediation"*, JHEP 1204 (2012) 137 [arXiv:1201.5164 [hep-ph]];

44. G. Nardini and N. Sahu, *"Re-reheating, Late Entropy Injection and Constraints from Baryogenesis Scenarios"*, arXiv:1109.2829 [hep-ph];

45. A. De Simone, G. Nardini, M. Quirós and A. Riotto, *"Magnetic Fields at First Order Phase Transitions: A Threat to Electroweak Baryogenesis"*, JCAP 1110 (2011) 030 [arXiv:1107.4317 [hep-ph]];

46. T. Konstandin, G. Nardini and M. Quiros, *"Gravitational Backreaction Effects on the Holographic Phase Transition"*, Phys. Rev. D 82 (2010) 083513 [arXiv:1007.1468 [hep-ph]];

47. M. Carena, G. Nardini, M. Quiros and C. E. M. Wagner, *"The Baryogenesis Window in the MSSM"*, Nucl. Phys. B 812 (2009) 243 [arXiv:0809.3760 [hep-ph]];

48. M. Carena, G. Nardini, M. Quiros and C. E. M. Wagner, *"The Effective Theory of the Light Stop Scenario"*, JHEP 0810 (2008) 62 [arXiv:0806.4297 [hep-ph]];

49. G. Nardini, M. Quiros and A. Wulzer, *"A Confining Strong First-Order Electroweak Phase Transition"*, JHEP 0709 (2007) 077 [arXiv:0706.3388 [hep-ph]].