

Enrico Morgante | CV

Dipartimento di Fisica, Università di Trieste

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04/12/2025

Informazioni personali

- Nato a Udine il 26/12/1988
- Cittadino italiano
- Sposato, quattro figli

Posizione attuale

Università di Trieste

Ricercatore di tipo B

Borsa Rita Levi-Montalcini

Trieste, Italia

Da Giugno 2023

Abilitazione Scientifica Nazionale

Settore Concorsuale 02/A2 - II Fascia

09/11/2020 – 09/11/2032

<https://asn18.cineca.it/pubblico/miur/esito-abilitato/02%252FA2/2/5>

Studi e carriera

Università Johannes Gutenberg

Post-doc

Mainz, Germania

10/2019 – 06/2023

Deutsches Elektronen-Synchrotron (DESY)

Post-doc

Hamburg, Germania

10/2016 – 09/2019

Università di Ginevra

PhD, Mention: très bien

Titolo della tesi: Aspects of WIMP Dark Matter searches at colliders and other probes

Relatore: Prof. Antonio Riotto (Università di Ginevra)

Equipollenza al titolo di Dottore di ricerca rilasciata il 18/09/2018

Ginevra, Svizzera

01/2013 – 09/2016

Scuola Normale Superiore

Diploma in Fisica, 70/70 e lode

Pisa, Italia

10/2007 – 09/2012

Università di Pisa

Laurea Magistrale in Fisica, 110/110

Titolo della tesi: Fisica del Flavour con simmetria $U(2)^3$

Relatore: Prof. Riccardo Barbieri (Scuola Normale Superiore, Pisa)

Pisa, Italia

10/2010 – 10/2012

Università di Pisa

Laurea Triennale in Fisica, 110/110 cum laude

Titolo della tesi: Ricerca di segnali di supersimmetria con eventi a multi-jet a LHC

Relatore: Prof. Luigi Rolandi (Scuola Normale Superiore, Pisa & CERN)

Pisa, Italia

10/2007 – 06/2010

Liceo Scientifico G. Marinelli

Scuola superiore, 100/100 e lode

Udine, Italia

09/2002 – 07/2007

Tesi di dottorato

Titolo: *Aspects of WIMP Dark Matter searches at colliders and other probes*

Relatore: Antonio Riotto (University of Geneva)

Difesa il: 20th Sep. 2016

Descrizione: La tesi discute lo stato delle ricerche di candidati di Materia Oscura di tipo WIMP e la loro interpretazione teorica, con particolare attenzione alle ricerche a LHC.

Premi: La tesi è stata selezionata dall'Università di Ginevra come "outstanding PhD thesis" e pubblicata dall'editore Springer nella serie "Springer theses" (DOI:10.1007/978-3-319-67606-7)

Attività di ricerca

Qui sotto una lista delle mie pubblicazioni, organizzate per argomento (alcune voci sono ripetute)

Axion-like particles:

- ALPs as DM candidates [1, 6, 7, 11]
- Relaxion mechanism as a cosmological solution to the hierarchy problem [5, 7–9, 11, 12]
- Growth of perturbation on a monodromy potential [5, 8, 9]

Early universe and Gravitational Waves:

- Scalar induced gravitational waves [2]
- Cosmological candidates for the PTA GW signal [3]
- Phase transitions at strong coupling and GW production [4]
- EW vacuum instability [15, 29]
- NLO corrections to DM freeze-out [21]

Baryogenesis:

- Baryogenesis with helical magnetic fields from axion inflation [10]

DM searches at the LHC:

- Validity of the EFT approach at colliders [18–20, 30]
- Simplified models [13, 14, 16, 23, 25–28]

Indirect DM searches:

- Degeneracy between the antiproton flux from astrophysics and from DM annihilations [17]
- Complementarity of DM searches [13, 14]

Inflation:

- Axion inflation [10]
- Vector perturbation and symmetries [22]

Bibliometric indicators:

Al 04/12/2025, ho pubblicato 22 articoli su riviste internazionali sottoposte a peer-review, e altri come preprints su arXiv.org o come "white papers" (su rivista o come pre-prints). I miei lavori sono stati citati 3229 volte (3032 contanto solamente gli articoli su rivista). Il mio indice-h_{HEP} è 21 [fonte: INSPIRE-HEP]. Il mio profilo INSPIRE è E.Morgante.1

<https://inspirehep.net/authors/1231774?ui-citation-summary=true>

Il mio profilo ORCID è 0000-0001-9389-0353

Collaborazioni

- LISA consortium associate member (da Luglio 2020)
- ATLAS/CMS DM Forum (2015)

Organizzazione

MITP scientific program: “*Windows into New Physics in the Sky*”, Mainz Institute for Theoretical Physics (14/07 – 01/08/2025)

co-organizzatori: Kim Berghaus (Caltech), Clara Murgui (U. Autonoma de Barcelona / IFAE), Davide Racco (ETH Zurich and U. Zurich), Maura Ramirez-Quezada (U. Mainz), Pedro Schwaller (U. Mainz)

<https://indico.mitp.uni-mainz.de/event/407/>

IFPU Focus Week: “*Fun with the phases of the universe*”, Institute for Fundamental Physics of the Universe (IFPU), Trieste (07/10 – 11/10/2024)

co-organizzatori: Aleksandr Azatov (SISSA), Toby Opferkuch (SISSA), Nicklas Ramberg (SISSA), Pedro Schwaller (U. Mainz), Lorenzo Ubaldi (Jožef Stefan Institute, Ljubljana)

<https://www.ifpu.it/focus-week-2024-10-07/>

MITP scientific program: “*Probing new physics with Gravitational Waves*”, Mainz Institute for Theoretical Physics (25/07 – 12/08/2022)

co-organizzatori: Yanou Cui (U. California, Riverside), Francesco D’Eramo (U. Padova), Lisa Randall (Harvard), Pedro Schwaller (U. Mainz), Raman Sundrum (U. Maryland)

<https://indico.mitp.uni-mainz.de/event/263/>

Mainz Theory Seminar: organizzatore del seminario settimanale di Fisica delle Alte Energie “Theorie Palaver” (04/2020 – 02/2022)

<https://www.thep.physik.uni-mainz.de/theorie-palaver/>

DESY Journal Club: organizzatore del Journal Club settimanale del gruppo teorico di DESY (09/2017 – 09/2019)

<https://indico.desy.de/indico/category/331/>

Finanziamenti

Programma giovani ricercatori “Rita Levi Montalcini”: Bando 2020, risultati pubblicati in Agosto 2022

<https://bandomontalcini.cineca.it/>

INFN fellowship: Vincitore di una fellowship “FELLINI - Fellowship for Innovation at INFN”, (offerta rifiutata) 02/2020

<https://web.infn.it/fellini/>

Fondation Ernst et Lucie Schmidheiny: Finanziamento per coprire i costi di partecipazione a una conferenza – 10/2015

<http://www.fondation-schmidheiny.ch>

Premi

- Tesi di dottorato selezionata come “Outstanding PhD thesis” e pubblicata nella serie “Springer Theses”, 2017
- Ammesso al “Corso ordinario” della Scuola Normale Superiore (con borsa della durata di 5 anni), 2007
- Medaglie alle olimpiadi italiane della matematica e della fisica, 2005-2007

Peer review

Referee per Journal of Cosmology and Astroparticle Physics (JCAP), Physical Review D (PRD), Journal of High Energy Physics (JHEP), Nuclear Physics B, Modern Physics Letters A

Seminars and talks at conferences

26 relazioni a conferenze internazionali e workshops (8 in Italia, 18 all'estero) 7 seminari su invito in istituti europei (2 in Italia, 7 all'estero)

1. Meeting of the INFN "Iniziativa Specifica" TAsP, Bologna (Italy), 01/2026, News on particle cosmology, [invited] <https://agenda.infn.it/event/49077/>
2. 10th Trilateral meeting, SISSA Trieste, 12/2025, [invited] <https://agenda.infn.it/event/49185/>
3. Jožef Stefan Institute and Faculty of Mathematics and Physics, University of Ljubljana high-energy physics seminars, Ljubljana (Slovenia), 03/2025, *Gravitational waves from confinement in improved holographic QCD*, [invited] <https://indico.ijs.si/event/2680/>
4. Whispers from the Dark Universe. Particles and Fields in the Gravitational Wave era, DESY Hamburg (Germany), 09/2024, *Gravitational waves from confinement in improved holographic QCD* <https://th-workshop2024.desy.de>
5. Quarkonia meet Dark Matter, München (Germany), 03/2024, *Gravitational waves from confinement in improved holographic QCD*, [invited] <https://indico.ph.tum.de/event/7422/>
6. Meeting of the INFN "Iniziativa Specifica" TAsP, Torino (Italy), 01/2024, *Gravitational waves from holographic phase transitions*, [invited] <https://agenda.infn.it/event/38389/overview>
7. Spring meeting of the German Physics Society (DPG) Particle Physics division, Dresden (Germany), 03/2023, *Axion fragmentation*, [invited] <https://www.dpg-verhandlungen.de/year/2023/conference/sbuk/part/t/session/50>
8. Beyond the Standard Models: Particle Physics meets Cosmology, Madrid (Spain), 10/2022, *Gravitational waves from a holographic phase transition*, [invited] <https://indico.ift.uam-csic.es/event/12/>
9. PADUA: Axions, Padova (Italy), 09/2022, *Axion fragmentation*, [invited] <https://indico.dfa.unipd.it/event/391/timetable/#20220913.detailed>
10. Towards the Next Fundamental Scale of Nature: New Approaches in Particle Physics and Cosmology, MITP Mainz (Germany), 07/2022, *Axion fragmentation*, <https://indico.mitp.uni-mainz.de/event/261/contributions/3954/>
11. High Energy Theory Group Seminars, Padova (Italy), 04/2022, *Axion fragmentation*, [invited] <https://indico.dfa.unipd.it/event/303/>
12. New Physics from the Sky, GGI Florence, 10/2021, *(Rel-)axion fragmentation*, [invited] <https://www.ggi.infn.it/showevent.pl?id=365>
13. Bright ideas for a dark universe, DESY Hamburg (Germany), 09/2021, *(Rel-)axion fragmentation* <https://th-workshop2021.desy.de>
14. Zooming in on axions in the Early Universe, online, 06/2020, *Axion fragmentation*, [invited] <https://indico.cern.ch/event/923834/overview>
15. Bielefeld Kosmologietag, online, 05/2020, *Relaxion fragmentation* <https://www2.physik.uni-bielefeld.de/kosmologietag2020.html>
16. COMPOSE-IT, Perugia (Italy), 01/2020, *EFT approach in Dark Matter searches*, [invited] <https://agenda.infn.it/event/20565/>
17. GRAPPA Seminar, Amsterdam (Netherlands), 12/2019, *Relaxion fragmentation*, [invited] <http://grappa.amsterdam/grappaseminars/>, <http://cosmology.amsterdam/events/calendar/>
18. Mainz Theorie Palaver, Mainz (Germany), 11/2019, *Relaxion mechanism: a cosmological solution to the hierarchy problem*, [invited] <https://iannounce.physik.uni-mainz.de/meeting/user/event/4403>
19. LPTHE Jussieu seminar, Paris (France), 06/2019, *Relaxion and relaxion DM*, [invited] <http://semparis.lpthe.jussieu.fr/list?date=7&seriescodes=89>
20. The Mysterious Universe: Dark Matter-Dark Energy-Cosmic Magnetic Fields, Mainz (Germany), 05/2019, *Baryogenesis with helical magnetic fields from axion inflation* <https://indico.mitp.uni-mainz.de/event/182/overview>

21. Light scalars: origin, cosmology, astrophysics and experimental probes, Benasque (Spain), 04/2019, *Relaxion updates*, [invited]
<https://indico.cern.ch/event/804047/overview>
22. The puzzle of dark matter - assembling the pieces, Hamburg (Germany), 10/2018, *Relaxion dark matter*, [invited], also chair of the final discussion session
<https://indico.desy.de/indico/event/19155/>
23. Particle Physics Challenges (DESY theory workshop), Hamburg (Germany), 10/2018, *Relaxion dark matter*
<https://indico.desy.de/indico/event/20110/overview>
24. Planck 2018, Bonn (Germany), 05/2018, *Relaxion dark matter*
<https://indico.desy.de/indico/event/18498/page/0>
25. Scalars 2017, Warsaw (Poland), 12/2017, *Cosmological relaxation of the EW scale after inflation*, [invited]
<http://indico.fuw.edu.pl/conferenceDisplay.py?confId=52>
26. Fundamental physics in the cosmos (DESY theory workshop), Hamburg (Germany), 09/2017, *Realizing the relaxion mechanism with particle production*
<https://indico.desy.de/indico/event/17479/overview>
27. Exploring the Dark Universe (Rencontres du Vietnam) Quy Nhon (Vietnam), 07/2017, *Non-SUSY WIMPS: simplified models and Dark Matter @ LHC*, [invited]
<http://vietnam.in2p3.fr/2017/dm/>
28. TeVPA16, CERN Geneva (Switzerland), 09/2016, *Complementarities of Dark Matter searches with Spin-Dependent interactions*
<https://indico.cern.ch/event/469963/contributions/2262784/>
29. SISSA Astroparticle seminar, Trieste (Italy), 05/2016, *Complementarities of Dark Matter searches with Spin-Dependent interactions*, [invited]
<http://www.sissa.it/app/activity/calendar.php>
30. LFC15 workshop, Trento (Italy), 09/2015, *Cosmological history of the Higgs vacuum instability*, [invited]
<https://agenda.infn.it/event/10047/?ovw=True>
31. IFAE seminar, Barcelona (Spain), 05/2014, *On the validity of effective field theory for dark matter searches at LHC*, [invited]
<http://indico.ifaes.es/conferenceDisplay.py?confId=38>
32. Incontri di Fisica delle Alte Energie, Gran Sasso (Italy), 04/2014, *On the validity of effective field theory for dark matter searches at LHC*, [invited]
<https://agenda.infn.it/conferenceDisplay.py?confId=7405>
33. Swiss Cosmology Day, Zurich (Switzerland), 02/2014, *On the validity of effective field theory for dark matter searches at LHC*
https://ethz.ch/content/dam/ethz/special-interest/phys/particle-physics/cosmologygroup-dam/SwissCosmoDays/SCD_2014.pdf

Teaching

Trieste University

Corsi universitari

- Teoria dei campi III - Laurea Magistrale in Fisica
- Modello Standard - Laurea Magistrale in Fisica
- Fisica delle particelle e cosmologia - Laurea Magistrale in Fisica
- Fisica Generale II - Laurea Triennale in Ingegneria

Università di Trieste

Relatore di tesi di laurea magistrale

- 12/2022 – 03/2024, Kinetic misalignment mechanism for axion-like particles

Università di Trieste

Relatore di tesi di laurea triennale

- 05/2025 – 10/2025, Meccanismi di produzione di materia oscura

Trieste, Italy

da Settembre 2023

Trieste, Italia

da Settembre 2023

Trieste, Italia

da Maggio 2025

Università di Mainz*Supervisione di tesi*

Sostegno a tesi di laurea, relatore prof. P. Schwaller

- 09/2021 – 01/2023, Axion production in the Early Universe using Thermal Field Theory
- 12/2019 – 01/2021, UV-Completion of the Relaxion Model with Dark Fermion Friction using the Clockwork Mechanism

Mainz, Germania

2019 – 2023

DESY*Supervisione di tesi*

Co-tutela di uno studente in internship, tutor prof. G. Servant

- Argomento: Relaxion mechanism

Hamburg, Germania

2017

Università di Ginevra*Assistente*Metodi matematici per la fisica II, Laurea triennale in Fisica, 2014-15 e 2015-16, *in Francese*Lab. IV, Laurea Magistrale, 2013-14, *in Inglese***Ginevra, Svizzera**

01/2013 – 09/2016

Altre attività:

Corso di fisica in preparazione all'esame di ammissione alle facoltà mediche, organizzato dall'Associazione Rosmini, Università di Udine, 2010 and 2011

Outreach

- "Rose, Libri, Musica e Vino - Omaggio a Margherita Hack", Trieste (Italy), May 2024
- Seminario sulle onde gravitazionali per studenti delle scuole superiori, Tradate (Italy), May 2024
- Seminario sulla materia oscura per studenti delle scuole medie, Torino, Maggio 2017
- Seminario sulla materia oscura per studenti delle scuole superiori, Udine, Marzo 2014
- Seminario sui neutrini per studenti delle scuole superiori, Udine, Marzo 2011

Lingue

Inglese: Avanzato**Francese, Tedesco:** Base

List of publications (including preprints)

Articoli di ricerca

- [1] M. Becker, J. Harz, E. Morgante, C. Puchades-Ibáñez, and P. Schwaller, “ALP production from abelian gauge bosons: beyond hard thermal loops”, *JHEP* 06 (2025), p. 160. DOI: [10.1007/JHEP06\(2025\)160](https://doi.org/10.1007/JHEP06(2025)160). arXiv: [2502.01729](https://arxiv.org/abs/2502.01729).
- [2] **LISA Cosmology Working Group** collaboration, “Reconstructing primordial curvature perturbations via scalar-induced gravitational waves with LISA”, *JCAP* 05 (2025), p. 062. DOI: [10.1088/1475-7516/2025/05/062](https://doi.org/10.1088/1475-7516/2025/05/062). arXiv: [2501.11320](https://arxiv.org/abs/2501.11320).
- [3] E. Madge, E. Morgante, C. Puchades-Ibáñez, N. Ramberg, W. Ratzinger, S. Schenk, and P. Schwaller, “Primordial gravitational waves in the nano-Hertz regime and PTA data — towards solving the GW inverse problem”, *JHEP* 10 (2023), p. 171. DOI: [10.1007/JHEP10\(2023\)171](https://doi.org/10.1007/JHEP10(2023)171). arXiv: [2306.14856](https://arxiv.org/abs/2306.14856).
- [4] E. Morgante, N. Ramberg, and P. Schwaller, “Gravitational waves from dark SU(3) Yang-Mills theory”, *Phys. Rev. D* 107.3 (2023), p. 036010. DOI: [10.1103/PhysRevD.107.036010](https://doi.org/10.1103/PhysRevD.107.036010). arXiv: [2210.11821](https://arxiv.org/abs/2210.11821).
- [5] E. Morgante, W. Ratzinger, R. Sato, and B. A. Stefanek, “Axion fragmentation on the lattice”, *JHEP* 12 (2021), p. 037. DOI: [10.1007/JHEP12\(2021\)037](https://doi.org/10.1007/JHEP12(2021)037). arXiv: [2109.13823](https://arxiv.org/abs/2109.13823).
- [6] S. Baumholzer, V. Brdar, and E. Morgante, “Structure Formation Limits on Axion-Like Dark Matter”, *JCAP* 05 (2021), p. 004. DOI: [10.1088/1475-7516/2021/05/004](https://doi.org/10.1088/1475-7516/2021/05/004). arXiv: [2012.09181](https://arxiv.org/abs/2012.09181).
- [7] N. Fonseca and E. Morgante, “Probing photophobic axion and relaxion dark matter”, *Phys. Rev. D* 103.1 (2021), p. 015011. DOI: [10.1103/PhysRevD.103.015011](https://doi.org/10.1103/PhysRevD.103.015011). arXiv: [2009.10974](https://arxiv.org/abs/2009.10974).
- [8] N. Fonseca, E. Morgante, R. Sato, and G. Servant, “Relaxion Fluctuations (Self-stopping Relaxion) and Overview of Relaxion Stopping Mechanisms”, *JHEP* 05 (2020). [Erratum: *JHEP* 01, 012 (2021)], p. 080. DOI: [10.1007/JHEP05\(2020\)080](https://doi.org/10.1007/JHEP05(2020)080). arXiv: [1911.08473](https://arxiv.org/abs/1911.08473).
- [9] N. Fonseca, E. Morgante, R. Sato, and G. Servant, “Axion fragmentation”, *JHEP* 04 (2020), p. 010. DOI: [10.1007/JHEP04\(2020\)010](https://doi.org/10.1007/JHEP04(2020)010). arXiv: [1911.08472](https://arxiv.org/abs/1911.08472).
- [10] V. Domcke, B. von Harling, E. Morgante, and K. Mukaida, “Baryogenesis from axion inflation”, *JCAP* 10 (2019), p. 032. DOI: [10.1088/1475-7516/2019/10/032](https://doi.org/10.1088/1475-7516/2019/10/032). arXiv: [1905.13318](https://arxiv.org/abs/1905.13318).
- [11] N. Fonseca and E. Morgante, “Relaxion Dark Matter”, *Phys. Rev. D* 100.5 (2019), p. 055010. DOI: [10.1103/PhysRevD.100.055010](https://doi.org/10.1103/PhysRevD.100.055010). arXiv: [1809.04534](https://arxiv.org/abs/1809.04534).
- [12] N. Fonseca, E. Morgante, and G. Servant, “Higgs relaxation after inflation”, *JHEP* 10 (2018), p. 020. DOI: [10.1007/JHEP10\(2018\)020](https://doi.org/10.1007/JHEP10(2018)020). arXiv: [1805.04543](https://arxiv.org/abs/1805.04543).
- [13] T. Jacques, A. Katz, E. Morgante, D. Racco, M. Rameez, and A. Riotto, “Complementarity of DM searches in a consistent simplified model: the case of Z' ”, *JHEP* 10 (2016). [Erratum: *JHEP* 01, 127 (2019)], p. 071. DOI: [10.1007/JHEP10\(2016\)071](https://doi.org/10.1007/JHEP10(2016)071). arXiv: [1605.06513](https://arxiv.org/abs/1605.06513).
- [14] E. Morgante, D. Racco, M. Rameez, and A. Riotto, “The 750 GeV Diphoton excess, Dark Matter and Constraints from the IceCube experiment”, *JHEP* 07 (2016), p. 141. DOI: [10.1007/JHEP07\(2016\)141](https://doi.org/10.1007/JHEP07(2016)141). arXiv: [1603.05592](https://arxiv.org/abs/1603.05592).
- [15] J. R. Espinosa, G. F. Giudice, E. Morgante, A. Riotto, L. Senatore, A. Strumia, and N. Tetradis, “The cosmological Higgstory of the vacuum instability”, *JHEP* 09 (2015), p. 174. DOI: [10.1007/JHEP09\(2015\)174](https://doi.org/10.1007/JHEP09(2015)174). arXiv: [1505.04825](https://arxiv.org/abs/1505.04825).
- [16] G. Busoni, A. De Simone, T. Jacques, E. Morgante, and A. Riotto, “Making the Most of the Relic Density for Dark Matter Searches at the LHC 14 TeV Run”, *JCAP* 03 (2015), p. 022. DOI: [10.1088/1475-7516/2015/03/022](https://doi.org/10.1088/1475-7516/2015/03/022). arXiv: [1410.7409](https://arxiv.org/abs/1410.7409).
- [17] V. Pettorino, G. Busoni, A. De Simone, E. Morgante, A. Riotto, and W. Xue, “Can AMS-02 discriminate the origin of an anti-proton signal?”, *JCAP* 10 (2014), p. 078. DOI: [10.1088/1475-7516/2014/10/078](https://doi.org/10.1088/1475-7516/2014/10/078). arXiv: [1406.5377](https://arxiv.org/abs/1406.5377).

- [18] G. Busoni, A. De Simone, T. Jacques, E. Morgante, and A. Riotto, “On the Validity of the Effective Field Theory for Dark Matter Searches at the LHC Part III: Analysis for the t -channel”, *JCAP* 09 (2014), p. 022. DOI: [10.1088/1475-7516/2014/09/022](https://doi.org/10.1088/1475-7516/2014/09/022). arXiv: [1405.3101](https://arxiv.org/abs/1405.3101).
- [19] G. Busoni, A. De Simone, J. Gramling, E. Morgante, and A. Riotto, “On the Validity of the Effective Field Theory for Dark Matter Searches at the LHC, Part II: Complete Analysis for the s -channel”, *JCAP* 06 (2014), p. 060. DOI: [10.1088/1475-7516/2014/06/060](https://doi.org/10.1088/1475-7516/2014/06/060). arXiv: [1402.1275](https://arxiv.org/abs/1402.1275).
- [20] G. Busoni, A. De Simone, E. Morgante, and A. Riotto, “On the Validity of the Effective Field Theory for Dark Matter Searches at the LHC”, *Phys. Lett. B* 728 (2014), pp. 412–421. DOI: [10.1016/j.physletb.2013.11.069](https://doi.org/10.1016/j.physletb.2013.11.069). arXiv: [1307.2253](https://arxiv.org/abs/1307.2253).
- [21] P. Ciafaloni, D. Comelli, A. De Simone, E. Morgante, A. Riotto, and A. Urbano, “The Role of Electroweak Corrections for the Dark Matter Relic Abundance”, *JCAP* 10 (2013), p. 031. DOI: [10.1088/1475-7516/2013/10/031](https://doi.org/10.1088/1475-7516/2013/10/031). arXiv: [1305.6391](https://arxiv.org/abs/1305.6391).
- [22] M. Biagetti, A. Kehagias, E. Morgante, H. Perrier, and A. Riotto, “Symmetries of Vector Perturbations during the de Sitter Epoch”, *JCAP* 07 (2013), p. 030. DOI: [10.1088/1475-7516/2013/07/030](https://doi.org/10.1088/1475-7516/2013/07/030). arXiv: [1304.7785](https://arxiv.org/abs/1304.7785).

Reviews e tesi.....

- [23] E. Morgante, “Simplified Dark Matter Models”, *Adv. High Energy Phys.* 2018 (2018), p. 5012043. DOI: [10.1155/2018/5012043](https://doi.org/10.1155/2018/5012043). arXiv: [1804.01245](https://arxiv.org/abs/1804.01245).
- [24] E. Morgante, “Aspects of WIMP Dark Matter searches at colliders and other probes”. *Springer Theses 2017* (DOI: [10.1007/978-3-319-67606-7](https://doi.org/10.1007/978-3-319-67606-7)). PhD thesis. Geneva U., Dept. Theor. Phys., Sept. 2016. DOI: [10.1007/978-3-319-67606-7](https://doi.org/10.1007/978-3-319-67606-7).

White papers.....

- [25] D. Abercrombie et al., “Dark Matter Benchmark Models for Early LHC Run-2 Searches: Report of the ATLAS/CMS Dark Matter Forum”, *Phys. Dark Univ.* 27 (2020). Ed. by A. Boveia, C. Doglioni, S. Lowette, S. Malik, and S. Mrenna, p. 100371. DOI: [10.1016/j.dark.2019.100371](https://doi.org/10.1016/j.dark.2019.100371). arXiv: [1507.00966](https://arxiv.org/abs/1507.00966).
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