

# David G. Cerdeño

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## Contact

### Address

Departament of Theoretical Physics &  
Institute for Theoretical Physics, IFT-UAM/CSIC  
Universidad Autónoma de Madrid, Cantoblanco 28049, Spain  
davidg.cerdeno@gmail.com

## Research Fields

### Astroparticle Physics

Theory and Phenomenology of Dark Matter models.

### Direct Dark Matter detection

Member of the SuperCDMS Collaboration.

### Particle Physics Phenomenology

Supersymmetry and String Theory phenomenology.

## Positions Held

2020	<b>Beatriz Galindo Senior Professor</b>	IFT, Universidad Autónoma de Madrid
2017-2020	<b>Associate Professor (Reader)</b>	IPPP, Durham University
2014-2017	<b>Assistant Professor (Lecturer)</b>	IPPP, Durham University
2009-2014	<b>Ramón y Cajal Fellow (Tenure track)</b>	IFT, Universidad Autónoma de Madrid
2006-2009	<b>Juan de la Cierva Fellow</b>	IFT, Universidad Autónoma de Madrid
2004-2006	<b>Research Associate</b>	IPPP, Durham University
2003-2004	<b>Postdoctoral Researcher</b>	Hamburg Universität
2002-2003	<b>Postdoctoral Researcher</b>	Martin-Luther Universität Halle-Wittenberg

## Qualifications

2016	<b>Fellow of the Higher Education Academy</b>	Higher Education Academy
2012	<b>Senior Lecturer (Profesor Titular) Spanish Accreditation</b>	ANECA
	Awarded by the National Agency for Quality Assessment and Accreditation of Spain.	
2002	<b>Ph.D. in Physics</b>	Universidad Autónoma de Madrid
	“Phenomenological analyses in supersymmetric scenarios, superstrings and M-theory”. Supervisor: Prof. Carlos Muñoz (25 July 2002).	
2000	<b>M.Sc. in Physics</b>	Universidad Autónoma de Madrid
	“Phenomenology of non-standard embedding and five-branes in M-theory”. Supervisor: Prof. Carlos Muñoz.	
1998	<b>Degree in Physics</b>	Universidad Autónoma de Madrid

## Administration and Community Service

2021-now	<b>Diversity and Equality Committee</b>	IFT, Universidad Autónoma de Madrid
2018-2020	<b>Course Director for the MSc programme "Particles, Strings and Cosmology"</b> I coordinate the MSc programme "Particles, Strings and Cosmology" at Durham University and I am the director of the MSc Board of Examiners.	Durham University
2015-2016	<b>Science Group Coordinator</b> I took an active part in the writing of the application to the DOE and NSF of the SuperCDMS SNOLAB project. The proposal to build an advanced dark matter experiment at the SNOLAB site was approved.	SuperCDMS Collaboration
2016-2020	<b>Diversity and Equality Committee</b> I have been a member of the Diversity and Equality Committee, currently the secretary. As such, I contributed to the (successful) ATHENA Swan Silver application.	Durham University

## Teaching

### Postgraduate Courses

2014-2020	<b>Astroparticle Physics</b> 6 courses, 8 hours each	Durham University
2018	<b>Producing and Detecting Dark Matter</b> Block Course by invitation, June 2018 (8 hours)	University of Valencia
2013-2020	<b>Astroparticle Physics</b> Lecturer and course coordinator. 7 courses, 12 hours each	Universidad Autónoma de Madrid
2009-2012	<b>Beyond the Standard Model</b> Lecturer and course coordinator. 3 courses, 10 hours each	Universidad Autónoma de Madrid
2009	<b>Dark matter and its direct detection</b> Block Course by invitation at the Max-Planck-Institut für Physik (Werner-Heisenberg-Institut) München, Germany, 6-9 April, 2009. (8 hours).	Max-Planck-Institut für Physik, München

### Undergraduate Courses

2018-2020	<b>Mathematics Workshop: Infinite Vector Spaces (PHYS3591)</b> 18 hours	Durham University
2014-2020	<b>Mathematics Workshop: Integral Transforms (PHYS3591)</b> 5 courses, 18 hours each	Durham University
2018-2019	<b>Physics Problem Solving: General Problems (PHYS3561)</b> 9 hours	Durham University
2014-2016	<b>Physics Problem Solving: Computing Projects (PHYS3561)</b> 2 courses, 16 hours each	Durham University
2007-2014	<b>Mathematical Methods in Physics II</b> Lecturer and course coordinator. 7 courses, 60 hours each	Universidad Autónoma de Madrid
2012-2014	<b>Experimental detection of dark matter: the SuperCDMS experiment</b> Lecturer and course coordinator. 2 courses, 60 hours each	Universidad Autónoma de Madrid
2004-2006	<b>Level 1 General Physics</b> Tutor. 2 courses, 38 hours each	Durham University

## Physics Schools

- 2021 **INFIERI** Universidad Autónoma de Madrid  
Designed a 3-hour workshop on “Dark Matter” and trained a group of seven demonstrators to impart it.
- 2014, 15, 17, 18, 19, 21 **Taller de Altas Energías (TAE)** Centro de Física Pedro Pascual, Benasque  
Lecturer for the course “Dark Matter” (5 courses, 5 hours each) and tutor.
- 2019 **1st International School on Particle Physics and Cosmology** Universidad Internacional Menéndez Pelayo  
Lecturer of the course “Dark Matter”(1 hour).
- 2016 **Higgs Centre School of Theoretical Physics 2016** Edinburgh University  
Lecturer of the course “Dark Matter 101: from production to detection” (17 hours) at the Higgs Centre for Theoretical Physics.
- 2015, 16, 17 **HEP Summer School** Lancaster University  
Lecturer for the course “Astroparticle Physics: Dark Matter and Neutrinos” (3 courses, 5 hours each) and tutor.
- 2008 **Taller de Altas Energías (TAE)** Universidad Autónoma de Madrid  
Tutor.
- 2005, 2006 **BUSSTEPP**  
Tutor at the 35<sup>th</sup> and 36<sup>th</sup> “British Universities Summer School in Theoretical Elementary Particle Physics” (BUSSTEPP 2005 in Ambleside and 2006 in Edinburgh).

# Student Supervision

## PhD

Students marked with an asterisk (\*) obtained a postdoctoral position after their PhD.

Ongoing	<b>David Alonso González</b>	Universidad Autónoma de Madrid
Ongoing	<b>Dorian Amaral</b>	Durham University
Ongoing	<b>Pablo Martín</b> PhD expected 2020	Universidad Autónoma de Madrid
2021	<b>Elliott M. T. Reid</b> Solar Neutrino Physics at Dark Matter Direct Detection Experiments	Durham University
2019	<b>Andrew Cheek (*)</b> “Preparing for Dark Matter: Maximising our discrimination power in the event of detection”	Durham University
2016	<b>Víctor Martín (*)</b> “Collider Phenomenology of Dark Matter Models”. Co-supervised with Dr. J. Moreno	Universidad Autónoma de Madrid
2014	<b>Miguel Peiró (*)</b> “A complementary approach for the identification of dark matter”	Universidad Autónoma de Madrid

## MSc

Students marked with an asterisk (\*) enrolled a PhD programme after their MSc.

Ongoing	<b>Adriana</b>	Universidad Autónoma de Madrid
	<b>Harrison Coombes (*)</b> “A Model of the Sneutrino as the Constituent Particle of Freeze-In Dark Matter”	Durham University
2016	<b>Marina Peñalver</b> “Background characterization in SuperCDMS”	Durham University
	<b>Pablo Martín (*)</b> “Phenomenology of the NMSSM at the LHC”	Durham University
	<b>Elena Perdomo (*)</b> “How high is the neutrino floor in dark matter direct detection experiments?”	Universidad Autónoma de Madrid
2015	<b>Elias Gerstmayr (*)</b> “Direct Detection of Dark Matter: Annual Modulation in EFT operators”	Durham University
	<b>Isabel Pennock</b> “Studying the neutrino coherent scattering with direct dark matter experiments”	Durham University
2013	<b>Leyre Esteban (*)</b> “Study of the background from cosmogenic muons in SuperCDMS”	Universidad Autónoma de Madrid
	<b>Sandra Robles (*)</b> “Phenomenology of the RH sneutrino in the NMSSM”	Universidad Autónoma de Madrid
2012	<b>Víctor Martín (*)</b> “Displaced Vertices in the NMSSM with Right-Handed Neutrino”	Universidad Autónoma de Madrid
2010	<b>Miguel Peiró (*)</b> “Very light sneutrino dark matter in the NMSSM”	Universidad Autónoma de Madrid

## BSc

Final year projects. Students marked with an asterisk (\*) enrolled an MSc or PhD programme after obtaining their degree.

2019	<b>Anna David (*)</b> "Identifying Anapole Dark Matter using Annual Modulation"	Durham University
	<b>Matthew Woodcock</b> "Directional Detection of Dark Matter"	Durham University
	<b>Oscar Ronald Torsten Braun-White (*)</b> "A Theorist's Approach to solving the Dark Matter Problem"	Durham University
	<b>Oscar Lally</b> "Dark Matter: Relic Density Calculation in the NMSSM and Higgs Portal"	Durham University
2018	<b>Dorian Amaral (*)</b> "Disentangling Dark Discs with Annual Modulation"	Durham University
	<b>Daniel Long</b> "Relic Density Computation for Particle Dark Matter"	Durham University
2017	<b>Elliott M. T. Reid (*)</b> "Direct Detection of Dark Matter"	Durham University
	<b>Wilf Shorrock (*)</b> "Direct Detection of Dark Matter"	Durham University
	<b>Oliver J. Farrell</b> "Particle models for Dark Matter"	Durham University
	<b>Anthony C. Graves</b> "Particle models for Dark Matter"	Durham University
2013	<b>Cristina Marcos Martín (*)</b> "Direct detection of dark matter"	Universidad Autónoma de Madrid
2006	<b>Tom Varley (*)</b> "Particle Dark Matter" (Co-supervised with A. Dedes).	Durham University

## Projects

Projects marked with an asterisk (\*) correspond to those where I was PI.

2022	<b>Parameters for Understanding Uncertainties (P4UU)</b> Local partner in an application supported by the Royal Society of Edinburgh (PI: Rebecca L. Collins)	Royal Society of Edinburgh
2020-2024	<b>(*)</b> Beatriz Galindo Complementary Grant. 216.000€(PI: David G. Cerdenoño).	SI2/PBG/2020-00005
2017-2019	<b>IPPP Grant</b> I contributed to writing the IPPP joint application, with a line on Astroparticle Physics for which I obtained funding for 1 postdoctoral researcher.	STFC
2013-2018	<b>String Phenomenology in the LHC Era</b> ERC Advanced Grant SPLE (PI: Luis Ibáñez).	RC-2012-ADG-20120216-32042
2013-2015	<b>Astroparticles in the Universe</b> Supported by the Spanish MICINN (PI: Carlos Muñoz).	FPA2012-34694
2012	<b>Supersymmetric Dark Matter (*)</b> Cooperation between UAM and Torino University, supported by the Spanish MICINN (PI: David G. Cerdeño).	AIC-D-2011-0771
2009-2014	<b>Proyecto de Investigación Ramón y Cajal (*)</b> Supported by the Spanish MICINN (PI: David G. Cerdeño).	1001050044
2009-2014	<b>Consolider-Ingenio 2010: MultiDark</b> Supported by the Spanish MICINN. (PI: Carlos Muñoz).	CSD2009-00064
2009-2014	<b>HEPHACOS</b> Supported by the Community of Madrid. (PI: Luis Ibáñez)	S2009/ESP-1473
2009-2012	<b>Astroparticles in the Universe</b> Supported by the Spanish MICINN. (PI: Carlos Muñoz).	FPA2009-08958
2008-2009	<b>Supersymmetric Dark Matter</b> Cooperation between UAM and Torino University, supported by the Spanish DGI of the MEC and the Italian INFN. (PI: Carlos Muñoz).	FPA2008-04058-E/INFN
2006-2009	<b>Astroparticles in the Universe: Dark Matter, Neutrinos, and Cosmic Rays</b> Supported by the DGI of the Spanish Ministry of Science and Education (MEC) (PI: Gustavo Yepes).	FPA 2006-01105
2006-2007	<b>Direct and Indirect Detection of Dark Matter in Supersymmetry and Superstrings</b> Acción Integrada Hispano-Francesa between UAM and CNRS (LPT-Orsay), supported by the Spanish DGI of the MEC and the French EGIDE of the Ministry of Foreign Affairs (PI: Carlos Muñoz).	HF-2005-0005
2007-2008	<b>Susy Dark Matter</b> Cooperation between UAM and Torino University, supported by the Spanish DGI of the MEC and the Italian INFN (PI: Carlos Muñoz).	INFN07-31, CICYT-INFN 2007
2006-2010	<b>UniverseNet</b> Research Training Network.	MRTN-CT-2006-035863
2004-2009	<b>European Network for Theoretical Astroparticle Physics (ENTApP)</b> Part of the Integrated Large Infrastructures for Astroparticle Science ( <b>ILIAS</b> ), through the University of Durham.	RII-CT-2004-506222
2004-2008	<b>The Quest for Unification: Theory confronts experiment</b> Research Training Network.	MRTN-CT-2004-503369
2003-2004	<b>Acción Integrada Hispano-Alemana</b> Through the DAAD (Deutscher Akademischer Austausch Dienst).	HA2002-0117
2003-2004	<b>Deutsche Forschungsgemeinschaft (DFG) Schwerpunktprogramm (1096)</b> Stringtheorie im Kontext von Teilchenphysik, Quantenfeldtheorie, Quantengravitation, Kosmologie und Mathematik.	DFG LO 536/5-2

# Event Organisation

## Conferences

2021	<b>Dark world to swampland: 6th IBS-IFT-MultiDark Workshop</b> (15-19 Nov 2021)	Online
	<b>18th MultiDark Consolider Workshop</b> (18-20 Oct 2021)	La Rábida, Spain
2020	<b>Dark world to swampland: 5th IBS-IFT-MultiDark Workshop</b> (13-16 Oct 2020)	Online
2019	<b>4th IBS-IPPP-MultiDark Workshop</b> (10-17 Oct 2020)	Daejeon
	<b>3rd IBS-IPPP-MultiDark Workshop</b> (10-17 Oct 2019)	Daejeon
	<b>UK HEP Forum: "What do the next 10 years have in store?"</b> (24-25 Sep 2019)	Abingdon
2018	<b>UK HEP Forum: "The Spice of Flavour"</b> (27-28 Nov 2018)	Abingdon
	<b>UKDM Workshop</b> (13 July 2018)	IPPP, Durham University
	<b>Unraveling the Mystery of Dark Matter</b> (12-16 March 2018)	IPPP, Durham University
2017	<b>UK HEP Forum: "Cosmology, Gravitation and Particle Physics"</b> (28-29 Nov 2017)	Abingdon
2016	<b>Dark Matter from aeV to ZeV: 3<sup>rd</sup> IBS-IPPP-MultiDark workshop</b> (21-25 Nov 2016)	IPPP, Durham University
	<b>Dark Matter Interpretations for Direct Detection</b> (9 Ago 2016)	Lincoln College, Oxford, UK
2015	<b>Annual Theory Meeting</b> (20-22 Dec 2015)	IPPP, Durham University
	<b>2<sup>nd</sup> IBS-MultiDark Workshop on Dark Matter</b> (23-27 Nov. 2015)	IFT, Universidad Autónoma de Madrid
2014	<b>IBS-MultiDark Program on Dark Matter and Axions</b> (9-22 Oct. 2014)	IBS, Daejeon, Korea
2013	<b>Why <math>m_H = 126</math> GeV?</b> 25-27 Sep 2013	IFT, Universidad Autónoma de Madrid
2010	<b>1<sup>st</sup> MultiDark Consolider Workshop</b> (25-27 Ene 2010)	IFT, Universidad Autónoma de Madrid
2009	<b>XV Christmas Workshop</b> (16-18 Dec 2009)	IFT, Universidad Autónoma de Madrid
	<b>miniWorkshop on Dark Matters</b> (16 - 18 Sep. 2009)	IFT, Universidad Autónoma de Madrid
2005	<b>SUSY05</b> Member of the organising committee (18-23 Jul. 2015).	IPPP, Durham University
	<b>pre-SUSY05 Workshop</b> One of three main organisers (29 Jun - 15 Jul 2015).	IPPP, Durham University



## Schools

- 2018 **YETI20018: Flavours and Resonances** IPPP, Durham University  
Young Experimentalists and Theorists Institute (Jan 2018).
- 2017 **YETI20017: Gravitational Probes of Fundamental Physics** IPPP, Durham University  
Young Experimentalists and Theorists Institute (Jan 2017).
- 2008 **ISAPP2008** Miraflores de la Sierra, Madrid  
International School on Astroparticle Physics (21 Jun - 1 Jul 2008).

## Discussion Sessions

- 2009-2016 **MultiDark Direct Detection Working Group**  
Coordinating the discussion sessions of the Direct Detection Working Group in MultiDark Collaboration Meetings (twice per year).
- 2005-2008 **ENTApP Visitors program**  
“Dark Matter in the unconstrained MSSM, Split Supersymmetry, and the NMSSM” (17 Jan. - 4 Feb. 2005, CERN, Geneva), and “Direct Detection of Dark Matter” (Feb. 2008, DESY Hamburg, Germany).

## Seminars

- 2016-2019 **IPPP, Durham University**  
Organiser of the CPT Colloquia.
- 2016-2018 **IPPP, Durham University**  
Organiser of the regular seminar programme.
- 2006-2009 **Universidad Autónoma de Madrid**  
Member of the organising committee of the regular seminar programme during the academic years 2006-2009.
- 2005-2006 **IPPP, Durham University**  
Member of the organising committee of the regular seminar programme during the academic year 2005-2006.

## Outreach

- 2017-2019 **Outreach coordinator** IPPP, Durham University
- 2017 **Royal Society Summer Exhibition** IPPP, Durham University  
Coordinator (together with Prof. A. Lenz) of the IPPP participation at the 2017 Royal Society Summer Exhibition. I managed a budget of £60.000, coordinated a team of 35 scientists and nine technicians (mechanical and electronics).
- 2009-2014 **Outreach coordinator** IFT, Universidad Autónoma de Madrid
- 2010-2014 **Outreach coordinator of the MultiDark Consolider Project**
- 2010-2014 **Member of the Outreach Committee for the Physics Degree** Universidad Autónoma de Madrid
- 2012-2013 **Member of the Outreach Working Group** SuperCDMS Collaboration

I have given over 40 public talks on various topics in Particle and Astroparticle Physics for a general audience. This includes seminars in Science and Arts Museums, contributions to multidisciplinary Masters programs, elaboration of material, etc. I have been the local organiser of activities for High School students (organiser of the “International Masterclass” at the IFT in 2010, 2011, 2012 and 2013). I have also contributed with

formative lectures (on elementary aspects of Particle Physics and Cosmology) for High School Teachers in 2011, 2012 and 2013.

# Seminars and Colloquia

More than 60 oral presentations in international conferences

Selected list of invited plenary talks:

- “Looking for Dark Matter in all directions”. CPAN meeting 2019, Oviedo, Spain, **21-23 October, 2019**.
- “Dark Matter Direct Detection”. Dark Matter 2018, Santander, Spain, **26 -30 June, 2018**.
- “Towards the Identification of Dark Matter”. Rencontres de Blois 2015, Blois, France, **31 May -5 June, 2015**
- “Dark Matter Particle Candidates”. TAUP 2013, Monterey, USA, **8-13 Sep. 2013**
- “Where is the New Physics II?- Review of latest non-LHC results”. International Workshop on Future Linear Colliders, Arlington, USA, **21-26 Oct. 2012**
- “Dark Matter”. XXXIX International Meeting on Fundamental Physics, LSC Canfranc, Spain, **8 Feb. 2011**
- “Direct detection of DM. Where do we go?”. Dark Matter in the Sky and Underground, University of Zurich, Switzerland, **22-24 Sep. 2010**
- “LHC impact on Dark Matter searches”. WONDER 2010 Workshop, INFN Gran Sasso National Laboratory (LNGS), Italy, **22 Mar. 2010**
- “Supersymmetric Dark Matter: Neutralinos and Sneutrinos”. VII workshop on Science with the New Generation of High Energy Gamma-ray Experiments (SciNeGHE 2009). Assisi, Italy, **7 Oct. 2009**
- “Direct Detection and Identification of Dark Matter”. International Symposium on Cosmology and Particle Astrophysics: CosPA 2008, Pohang, Korea, **1 Nov. 2008**
- “WIMPs: a brief bestiary”. 4<sup>th</sup> Patras Workshop on Axions, WIMPs and WISPs, DESY Hamburg, Germany, **18 Jun. 2008**

50 invited seminars at various universities and research centres

**2021:** IFT Madrid (Spain)

**2020:** Complutense Madrid (Spain), CP3 (Belgium)

**2019:** Queens (Canada); Rome (Italy)

**2018:** Oxford (UK), IFAE (Spain); Zaragoza (Spain); Liverpool (UK)

**2017:** Maynooth (Ireland), Bristol (UK), Royal Holloway (UK)

**2016:** Manchester (UK); Imperial College (UK);

**2015:** IFAE (Spain); Swansea (UK); Nottingham (UK); IPPP (Durham);

**2014:** Granada (Spain); Bonn (Germany);

**2013:** INFN Torino (Italy); GRAPPA Amsterdam (The Netherlands); DESY Hamburg (Germany), IFT (Spain)

**2012:** IFIC (Spain); ULB (Belgium); TMU (Munich)

**2011:** MPIK Heidelberg (Germany); RWTH Aachen (Germany); University of Minnesota (US); IFAE (Spain);

**2009:** TUM (Germany); IFIC (Spain).

**2008:** IAP (France); IFT-UAM (Spain); SNU (Korea); KIAS (Korea); KAIST (Korea).

**2007:** LPT, Orsay (France); CAB-INTA (Spain); IFT-UAM (Spain).

**2006:** University of Sussex (UK).

**2005:** Univ. of Oxford (UK); Centre for Particle Physics at Royal Holloway (UK).

**2004:** Univ. of Lancaster (UK); Univ. of Sheffield (UK); Univ. of Liverpool (UK).

**2003:** DESY Hamburg (Germany) (3 seminars); IPPP Durham (UK).

**2002:** Martin-Luther-Universität Halle-Wittenberg (Germany) (2 seminars).

#### Colloquia

**2021:** “*Neutrinos in Dark Matter Experiments: Friends or Foes?*”, Nov 2021, York University (Canada)

**2018:** “*Seeing the invisible: How to detect and identify the dark matter of the Universe*”, Feb 2018 Liverpool University (UK)

**2015:** “*Identifying the Dark Matter*”, Feb 2015, Durham University (UK)

**2011:** “*Complementarity of Dark Matter Searches*” Nov. 2011, IFAE (Spain)

# Publications

I have published 70 articles in refereed journals, one book chapter and over 20 proceedings for international conferences. My publications have received more than 4500 citations and leading to an h-index of 36.

1. **"B anomalies and dark matter: a complex connection"**  
D. G. Cerdeño, A. Cheek, P. Martn-Ramiro and J. M. Moreno.  
arXiv:1902.01789 [hep-ph]  
DOI:10.1140/epjc/s10052-019-6979-x  
Eur. Phys. J. C **79**, no. 6, 517 (2019)  
IPPP/19/8; IFT-UAM/CSIC-19-13  
INSPIRE-HEP entry
2. **"On the correlation between the local dark matter and stellar velocities"**  
N. Bozorgnia, A. Fattahi, D. G. Cerdeño, C. S. Frenk, F. A. Gmez, R. J. J. Grand, F. Marinacci and R. Pakmor.  
arXiv:1811.11763 [astro-ph.GA]  
DOI:10.1088/1475-7516/2019/06/045  
JCAP **1906**, no. 06, 045 (2019)  
INSPIRE-HEP entry
3. **"Opening the energy window on direct dark matter detection"**  
N. Bozorgnia, D. G. Cerdeño, A. Cheek and B. Penning.  
arXiv:1810.05576 [hep-ph]  
DOI:10.1088/1475-7516/2018/12/013  
JCAP **1812**, no. 12, 013 (2018)  
IPPP/18/92  
INSPIRE-HEP entry
4. **"How high is the neutrino floor?"**  
C. Błhm, D. G. Cerdeño, P. A. N. Machado, A. Olivares-Del Campo and E. Reid.  
arXiv:1809.06385 [hep-ph]  
DOI:10.1088/1475-7516/2019/01/043  
JCAP **1901**, 043 (2019)  
IPPP/18/72, FERMILAB-PUB-18-486-T  
INSPIRE-HEP entry
5. **"Search for Low-Mass Dark Matter with CDMSlite Using a Profile Likelihood Fit"**  
R. Agnese *et al.* [SuperCDMS Collaboration].  
arXiv:1808.09098 [astro-ph.CO]  
DOI:10.1103/PhysRevD.99.062001  
Phys. Rev. D **99**, no. 6, 062001 (2019)  
FERMILAB-PUB-18-435-AE  
INSPIRE-HEP entry
6. **"Production Rate Measurement of Tritium and Other Cosmogenic Isotopes in Germanium with CDMSlite"**  
R. Agnese *et al.* [SuperCDMS Collaboration].  
arXiv:1806.07043 [physics.ins-det]  
DOI:10.1016/j.astropartphys.2018.08.006  
Astropart. Phys. **104**, 1 (2019)  
FERMILAB-PUB-18-289-AE  
INSPIRE-HEP entry
7. **"Energy Loss Due to Defect Formation from  $^{206}\text{Pb}$  Recoils in SuperCDMS Germanium Detectors"**  
R. Agnese *et al.* [SuperCDMS Collaboration].  
arXiv:1805.09942 [physics.ins-det]  
DOI:10.1063/1.5041457  
Appl. Phys. Lett. **113**, no. 9, 092101 (2018)

FERMILAB-PUB-18-291-AE  
INSPIRE-HEP entry

8. **"The Power of Genetic Algorithms: what remains of the pMSSM?"**  
S. Abel, D. G. Cerdeño and S. Robles.  
arXiv:1805.03615 [hep-ph]  
IPPP/18/32, IPPP-18-32  
INSPIRE-HEP entry
9. **"First Dark Matter Constraints from a SuperCDMS Single-Charge Sensitive Detector"**  
R. Agnese *et al.* [SuperCDMS Collaboration].  
arXiv:1804.10697 [hep-ex]  
DOI:10.1103/PhysRevLett.122.069901, 10.1103/PhysRevLett.121.051301  
Phys. Rev. Lett. **121**, no. 5, 051301 (2018), Erratum: [Phys. Rev. Lett. **122**, no. 6, 069901 (2019)]  
FERMILAB-PUB-18-150-AE  
INSPIRE-HEP entry
10. **"Nuclear-Recoil Energy Scale in CDMS II Silicon Dark-Matter Detectors"**  
R. Agnese *et al.* [CDMS Collaboration].  
arXiv:1803.02903 [physics.ins-det]  
DOI:10.1016/j.nima.2018.07.028  
Nucl. Instrum. Meth. A **905**, 71 (2018)  
FERMILAB-PUB-18-078-AE-CD-E  
INSPIRE-HEP entry
11. **"Surrogate Models for Direct Dark Matter Detection"**  
D. G. Cerdeño, A. Cheek, E. Reid and H. Schulz.  
arXiv:1802.03174 [hep-ph]  
DOI:10.1088/1475-7516/2018/08/011  
JCAP **1808**, no. 08, 011 (2018)  
IPPP-18-12, DCTP-18-24, IPPP/18/12; DCTP/18/24  
INSPIRE-HEP entry
12. **" $B + L$  violation at colliders and new physics"**  
D. G. Cerdeño, P. Reimitz, K. Sakurai and C. Tamarit.  
arXiv:1801.03492 [hep-ph]  
DOI:10.1007/JHEP04(2018)076  
JHEP **1804**, 076 (2018)  
IPPP-17-101, DCTP-17-202, TUM-HEP-1126-18  
INSPIRE-HEP entry
13. **"CNO Neutrino Grand Prix: The race to solve the solar metallicity problem"**  
D. G. Cerdeño, J. H. Davis, M. Fairbairn and A. C. Vincent.  
arXiv:1712.06522 [hep-ph]  
DOI:10.1088/1475-7516/2018/04/037  
JCAP **1804**, 037 (2018)  
IPPP-17-103, DCTP-17-206, KCL-PH-TH-2017-64  
INSPIRE-HEP entry
14. **"Results from the Super Cryogenic Dark Matter Search Experiment at Soudan"**  
R. Agnese *et al.* [SuperCDMS Collaboration].  
arXiv:1708.08869 [hep-ex]  
DOI:10.1103/PhysRevLett.120.061802  
Phys. Rev. Lett. **120**, no. 6, 061802 (2018)  
FERMILAB-PUB-17-346-AE-E  
INSPIRE-HEP entry
15. **"The Constrained NMSSM with right-handed neutrinos"**  
D. G. Cerdeño, V. De Romeri, V. Martn-Lozano, K. A. Olive and O. Seto.

arXiv:1707.03990 [hep-ph]  
DOI:10.1140/epjc/s10052-018-5689-0  
Eur. Phys. J. C **78**, no. 4, 290 (2018)  
IPPP-17-56, DCTP-17-112, IFT-UAM-CSIC-17-064, BONN-TH-2017-06, EPHOU-17-011, UMN-TH-3631-17, FTPI-MINN-17-13  
INSPIRE-HEP entry

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